THE DENTAL DIGEST

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"AND I ALSO HAVE GIVEN YOU CLEANNESS OF TEETH IN ALL YOUR CITIES" (Amos 4-6)*

BY E. RANDALL JOHNSON, D.D.S., BUFFALO, NEW YORK.

WITH reference I think I have established the antiquity of dentistry; but as further evidence, let me tell you that I have seen dental bridgework which was exhumed from the tombs of Egypt; it was crude, but the gold bands, after thousands of years, still held the human tooth.

To-day I have presented you a toothbrush as a souvenir which is an exact reproduction of the brush used before the Christian era, and which to-day is in use in the heart of Darkest Africa and the Oriental countries; in fact, this is an Oriental Toothbrush.

"The morning ablutions of the Oriental of whatever caste are never complete unless his teeth have been cleaned and his mouth washed"; in fact, "no food may be eaten until this ceremony is over." To-day we are not to deal with the antique but rather with that part of dentistry which is in the forefront of the march of progress, and as corroborative evidence that dentistry is advancing, let me read from a letter sent out,

^{*} Read at the meeting of the Greater Buffalo Club, Buffalo, May 9, 1912.

not long since, by the then president of the New York State Dental Society to the members of the profession:

"Your attention has necessarily been directed to the growing enthusiasm so manifest in our profession during the past few years. Dentistry to-day is the dentistry of ten, five, or even two years ago completely revolutionized. The dentist who has slept for even a year awakes bewildered at the many applications in which so many of the newer inventions find place. Do you know that even last week thousands of teeth were saved easily and effectually by the cast inlay and other principles variously applied, yet absolutely unemployed in the profession two years ago?"

In speaking of these newer methods I shall classify them under three heads:

1. Preventive Dentistry is the practice of placing the mouth and teeth in such condition as to make decay almost impossible; this is accomplished by the removal of every foreign particle from the mouth. The teeth are cleaned, filed, and polished not only above the gums but below as well wherever a pocket exists and are left in a glistening condition which makes lodgment of food, tartar, and germs impossible.

Particular attention is paid to the surfaces and edges of old fillings, that they may offer no lodgment for foreign substance.

This treatment is recognized as the cure for pyorrhea, commonly known as the loosening of the teeth, and if persistently followed the patient is immune from tooth decay.

2. Cosmetic Dentistry.—It is under this head that dentistry has made its greatest advancement.

It consists of the production of facial harmony by the removal of everything unsightly from the mouth, such as the correction of oral deformities or irregularities, should they exist, and the substitution of porcelain for metal, and in the filling and restoration of broken-down or lost teeth.

Owing to lack of time we shall confine our remarks to the working of porcelain, it being the very climax of art in dentistry.

Porcelain fillings or inlays, as we shall call them, have been used with indifferent success for about twenty-five years; but not until within about five years ago have the methods and material been so perfected as to make it the ideal filling.

You ask what are these great advantages, and I mention the cosmetic one first. With porcelain it is possible to match the shape and color of the natural tooth so closely that detection is impossible at a distance of two or three feet.

a. Owing to the method of preparing the cavity for the filling the

minimum amount of good tooth material is lost, but this procedure is reversed for the ordinary gold filling.

- b. Porcelain being a nonconductor of heat and cold, it can be placed directly over an exposed nerve without fear of disastrous results. This alone so increases the range of possibilities in preserving the natural organs as almost to eliminate the necessity for crowns on the front teeth.
- c. As porcelain is a nonconductor of electricity, its use relieves the patient of the extreme pain, due to galvanic action, so often present in the mouth where dissimilar metals are used for fillings and crowns; in fact, many an otherwise good amalgam filling has been disintegrated by electrolysis where this condition exists.
- d. And from the patients' standpoint, the most important advantage of all is the complete absence of all the unpleasant features connected with the insertion of the ordinary gold filling, such as the elimination of the use of the rubber dam, tying ligatures under the gums, malleting on a tooth already so sore as to be sensitive to the touch of the tongue, polishing the filling with sandpaper disks and strips.

Such ordeals as these are now only found in offices where the antique is venerated.

Before passing from this inlay, let me direct your attention to the fact that, as inlays are cemented in place they become a veneer on the tooth and consequently add strength and rigidity to an otherwise weak organ; the opposite result is attained with ordinary gold filling.

I have been asked "Are Porcelain Inlays permanent fillings?" They are; the chance of failure being but one in ten as compared with the ordinary gold filling.

I might add that dentists who do not work porcelain, or who have and failed, owing to their own lack of preparation, always condemn its use; the reason is obvious.

Now as to porcelain crowns. The old method, as you are aware, is to cut off the tooth under the gum and then enlarge the nerve canal sufficiently to admit the retaining post of the crown.

The enlarging or drilling out of the root canal is attended with no small risk and uncertainty, especially so in small teeth.

When drilling to enlarge the root canal you are removing tooth material in such quantities as to imprint the stability of the work as well as running a risk of penetrating the side or end of the tooth, which frequently means the loss of the root; but granting this part of the work is well and successfully accomplished, the one great weakness of this system is that the crown is retained in position with a platinum post (unless it be one of the cheaper crowns), which metal is so soft

and ductile as to permit movement of the crown under stress of mastication, thereby opening the joint where the crown and root meet, offering an easy seat for the attack of decay with the ultimate loss of both crown and root.

The new or conservative way of crowning is merely to reduce the tooth to be crowned to such size and shape as will admit of a jacket of porcelain of sufficient bulk to give strength and durability to the crown; this is called a jacket crown.

Frequently with the use of this crown the nerve can be preserved alive, but where that is impossible, the nerve is removed, the nerve canal filled, and the minimum amount of tooth material is lost.

The greatest advantage of this crown is that the natural tooth acts as the post to retain the crown, thereby obviating all danger of opening of joints.

As with the porcelain inlay, the jacket crown acts as a veneer to the tooth, thereby adding all the advantages of that system of dentistry.

3. Painless Dentistry.—The third in my classification is at once the one of greatest interest to the patient—it is painless dentistry.

With this method all operations on the six upper front teeth can be performed without greater pain than accompanies the trimming of the finger nails.

You say "It is incredible," but it is a fact, and several of those present can bear me out in this statement.

This result is accomplished by applying certain drugs on cotton to the mucous membrane in the nose on the side of the face corresponding to the tooth upon which the operation is to be performed.

This is the most marvelous step in dentistry, eradicating the last objection to having dental work done.

The fear of being hurt has been the one great obstacle in the path to the dentist's office.

In passing, I might mention that the killing of nerves is now but a painful memory in the office of a progressive dentist.

We now take them out alive, painlessly, in five minutes; this also facilitates the operation of filling, for the nerve can be removed and the tooth filled in one sitting.

To Get a Sharp Die.—To get a good sharp die with Malott's metal at all times, pour your metal (I use a rubber ring in which to pour it) and just before it hardens press firmly down on the metal with a glass pestle about the size of the rubber ring. The die will be smooth and free from bubbles.—L. C. Holland, D.D.S., Suffolk, Va.

THE IMPORTANCE OF THE ORAL CAVITY*

BY ALONZO MILTON NODINE, D.D.S., NEW YORK

I am very conscious of the delightful distinction and pleasant privilege that comes to me in being invited to speak to you in behalf of the Dental Department of the New York Nose, Throat, and Lung Hospital.

So many of the causes and so much of the success and the failure of your work in the neighboring fields of the nose, throat, accessory sinuses and the lungs, depends upon the conditions and the correction of those conditions in the oral cavity that its true importance is now forcefully and justly appreciated.

Invasion of disease is due to the undermining and breakdown of the proper and natural resistance of the body. The consensus of opinion of scientific investigators and clinical observers is that the conditions present in oral sepsis are the most constant and insidious underminers of that natural resistance.

"My clinical experience teaches me," said Sir William Hunter, "that if oral sepsis could be excluded the other channels by which medical sepsis gains entrance to the body might be almost ignored."

Sir George Newman's report, as the Chief Medical Officer of the London Board of Education, called forth editorial comment in the London Times to this effect:

"If we put other matters aside, the discovery that about 40 per cent. of the children in the schools suffer from extensive and injurious decay of the teeth is a matter of grave national concern, and probably as important to the future health and fitness of the next generation as the prevalence of tuberculosis, for which it is proposed in the National Insurance bill to make costly and elaborate provision."

Holding these truths to be self-evident, the boards of health of this and other large cities will soon devise means and measures for the prevention and repair of the appalling condition of the teeth of the school children.

I predict that a year or two years will see the establishment of clinics by the municipal authorities to accomplish this work. To indicate how near that day is, let me remind you that the first draft of last year's budget contained an item of \$26,000, but was stricken out on the plea of economy.

^{*}An address at the annual dinner of the Clinical Society of the New York Nose, Throat, and Lung Hospital at the New York A. C. Club, March 9, 1912.

To the effective work of the dental department of this hospital and of other hospitals must be attributed as much as any other one force, the establishment of these municipal clinics.

"We find that our institutions have the faults of individuals," said Ingersoll. "Nations must be composed of men and women; and as they have their faults, nations cannot be perfect."

The dental department of this hospital is not "perfect" because backed by faulty men—with one or two exceptions—nor have we stepped on the tail of an ever-advancing ideal.

But the equipment of the dental department is not exceeded by that of any other department, and in volume of work accomplished compares very favorably with that of the rest of the institution.

"A happy man or woman is a better thing to find than a five-pound note," said Stevenson. "He or she is a radiating focus of good will, and their entrance into the room is as though another candle had been lighted."

So you, gentlemen, in your departments and we in ours are making better things "than five-pound notes" and helping to light a few candles.

"For life is a mirror of king and slave,

It is just what we are and do;

Then give to the world the best you have,

And the best will come back to you."

We hear much about professional dignity from one source and another nowadays. But I must confess, gentlemen, I don't know what this fleeting and ephemeral thing is. Yet, from what I gather here tonight, I recognize that there is a dignity, the warp and woof of every conscious conception of sterling worth, and that dignity I am pleased to style the dignity of beneficent purpose; into it not only the medical and the dental professions, but the whole world is, in an increasing degree, projecting its organized efforts.

To Clear Crowns, Bridges, Inlays, etc.—Take H₂S.O₄ full strength and boil in a test tube. The sulphuric acid dissolves the alloy in the gold—leaving a finish of pure gold. It is one of the best ways I know of to clean an old bridge. Occasionally you will break a test tube, but don't let that bother you.—E. Arthur Meservey, D.D.S., Kearney, Neb. (To avoid breaking test tubes, have them perfectly dry on outside, and apply heat gently.—Editor.)

THE UNITY OF PROFESSIONAL AND BUSINESS DENTISTRY*

By Jerome G. Hess, D.D.S., Elizabethtown, Pennsylvania

It is our aim to make and keep dentistry the leading profession. Almost every branch of study has contributed something of merit in raising dentistry to its present plane, although the applied arts, medical and surgical research, have a more direct relation to dental science than any other phase of scientific investigation and experience, which knowledge acquired is applied most skillfully at less remuneration than the wages of many unskilled laborers.

When taking a glance at the unprofessional world, we see the rest of busy humanity engaged in an accurate study of "field of operations," "capital invested," "cost of production," "conservation of energy," "time and profits." It is equally important that the professional dentist make a similar systematic study and apply exactly the same principles to his practice as the manufacturing merchant or builder to his business. The idea that medicine and dentistry are humanitarianism or that strict business lowers the profession, is fallacious. If this were true then the clothier, grocer, contractor, farmer, and others should give their time, materials, and services for the benefit of humanity without the application of business accuracy. But this would be an act of injustice——to give services gratis to the public.

Men are engaged in their respective vocations to earn a good living and secure a competence for the evening of life when the vitality of earlier years has gone and when the earning capacity is limited. Every self-respecting individual looks into the future and strives to acquire that which guarantees freedom from the undesirable in his declining years.

Skilled laborers are paid directly in proportion to their ability or skill and for the time required for the execution of their work. Most of such workers received some remuneration while acquiring knowledge and proficiency. Since this is a positive fact, is not a professional dentist entitled to a liberal compensation for his time, knowledge, and skill? In applying pure business in a professional practice, principle need not, and positively must not, be sacrificed, for the basis of true professionalism obligates one to cheerfully relieve suffering in cases of necessity, regardless of possible financial returns, because the poor and unfortunate need the services of those qualified to render the required assistance in emergencies.

^{*} Read at Harris Dental Society, Lancaster, Pa., March, 1912.

Dentists are classified as Advertisers and Ethical. It would be better to classify them as Nonprofessional and Professional Dentists, because some advertising men render excellent services while some so-called ethical dentists are wholly unqualified to practise dentistry. The former class is paid too much no matter how small a fee is tendered them, but the professional dentist who has acquired a liberal knowledge, who exercises good judgment, who possesses a keen sense of justice and honor, and who has developed a high degree of skill, surely should be rewarded for his work which consists of preventative as well as reparative dentistry and the instruction of the public regarding the proper use and care of the mouth and teeth.

A professional dentist will not serve according to the wishes and dictates of a prospective patient, as one not having made a careful study of the subject does not know what is required. But if an individual presents himself for professional care, a careful examination of oral conditions will be made, the proper method of treatment and restoration will be decided and patient advised accordingly. It is possible to give an approximate cost in many cases, but since the number of treatments and actual time required for the rendition of the proper services is unknown, no definite price can be quoted.

Frequent criticism is made when one charges for each treatment and for every other individual consideration of conditions at hand. A charge is the only right solution to the problem, because we as dentists do not get the medicine and instruments required for giving treatments without cost; furthermore, it is the only honest way of doing justice to ourselves.

Do the farmers give their produce for anything less than market value? Does an owner of an office building make a reduction for dentists when payment of rent is due? Do public-service corporations offer our profession discounts? Does a factory employee work a half hour overtime, two or three days each week, and not ask for his just pay for working extra time? What man, when answering these questions honestly, would offer to give treatments for nothing, would extract teeth free, if given the privilege of making an artificial denture, give advice gratis or insert a gold filling for the price of admission to a vaudeville?

Dentistry is a highly exacting profession, and unless we combine business system with professionalism we shall not command the emoluments to which we are entitled. No higher appreciation is placed upon any vocation than that standard set by the individuals engaged in that particular pursuit. Time is a potent factor in any legitimate business. Satisfaction is a valuable asset in extending the limits of one's business career. The product of knowledge and skill governs their value. Law is recognized as one of the highest professions. Medicine is gaining rapidly. Dental Science has made marvelous progress during the last decade, but the advancement in regard to fees has not kept pace with the scientific growth, which stands as a guarantee that those engaged in its practice have not sufficiently united the professional and business spirit to effect the desired results in this phase of dentistry.

THE EXTRACTION OF TEETH UNDER NITROUS OXIDE AND OXYGEN*

BY M. FRIEDLAND, D.D.S., NEW YORK CITY

As the science of therapeutics and operative dentistry has taken such gigantic strides for the last fifteen years—when broken-down crowns, putrescent teeth and roots could be brought in useful state again, the drilling and enlarging of root canals with special drills and powerful acids, inserting big inlays with undercuts covering the mesial and distal sides of the tooth, and even split single-rooted teeth tightened with rings and ligated with wire—when all the above-mentioned methods have failed, the tooth is doomed for extraction, to which the extracting forceps do not take very kindly, as in such cases the tooth is very brittle and in a weakened condition; under these circumstances the extraction of teeth has become quite a difficult problem.

I will now go step by step, from adjusting the position of the chair, until operation is completed.

It is advisable to have a separate room and chair for the extraction of teeth and administration of anæsthetics. The chair should be of a firm build, and once adjusted should be placed to the full benefit of the operator for the extraction of every tooth in the mouth. To obtain the above-mentioned convenience, adjust your chair in a semi-horizontal position. I have found this position of great advantage both for the comfort of the patient and the convenience of the operator. The comfort the patient derives is as follows: His body rests in a reclined easy position, and when the anæsthetic is administered he avoids the sensation of numbness in the lower extremities, which is at times of an annoying nature. In this position the circulation of blood

^{*} Read at the meeting of the Harlem Dental Society, April 25, 1912.

through the entire system is more natural than the position of a sharp angle.

The benefit the operator derives is that the patient is firm in the position you have placed him, and as the weight of the body is at the back of the chair, you can have a better light for every tooth in the mouth and control the patient in the adjusted position very easily when he becomes unruly.

The room should be fitted with all the appliances and instruments for extracting purposes, with all remedies in case of an emergency, and with as little display as possible, so as not to excite the patient who has to undergo the operation. Your assistant should see, before placing the patient in the chair, that all his clothing is comfortable, the neckwear removed, and a rubber apron adjusted. Examine the tooth or teeth carefully as to the depth and walls of the cavity. If more than six teeth are to be extracted, mark them on a diagram, and the same should be placed in a convenient position for your verification during the operation. Select your forceps and place them within easy reach. Interlock the patient's hands, as this will avoid unnecessary trouble later. Adjust the proper mouth prop and instruct your patient to breathe deeply and regularly.

I will not go into the history of N2O, as it is all well known to you, but will say that the requirement of a perfect anaesthesia should be: 1st, Safety; 2d, Complete Anaesthesia; 3d, No bad after effects; 4th, Duration.

Concerning safety, N2O, even to-day, is acknowledged the standard bearer of safety. No matter what has been said against it, no one has ever claimed that other anaesthetic agents are safer, but you will always read, "It is just as safe." We must all recognize the fact that when placing a patient under any general anæsthetic there is always some danger involved which cannot be foreseen; N2O answers all our demands except duration, and this objectionable feature can be overcome by adding oxygen, which was introduced by Dr. Andrews, of Chicago, some years ago. Since this introduction, anæsthetists all over the country use at present the mixture of the two gases for major operations in cases where ether or chloroform are contraindicated on account of the patient's physical condition. At present, whenever an anæsthesia of a long duration is desired on anæmic or generally weak people, oxygen is used with ether and chloroform in every hospital. The longer the anæsthesia the more urgent is the call of the blood for oxygen. It is known that when an anæsthetic is used the blood becomes more and more venous from not getting sufficient oxygen from the air by the irregular form of breathing, and the first signs of evanosis or asphyxia is produced by the diminution of oxygen more than by the increased amount of carbon dioxide. In general, while breathing, the blood in the lungs takes oxygen from the air and gives forth carbon dioxide with the exhaling breath; this clearly gives us the great value oxygen has in general anaesthetics.

THE ADMINISTRATION OF N20 WITH AIR AND OXYGEN

When the hood is placed in position, it should be well in contact with the face, as a constant leakage of air will prevent the proper action of the gas. Silence should prevail during the entire operation, as you must not forget the fact that the last thing that is lost is the faculty of hearing, and also the first regained. Press the knob of the inhaler and watch the patient's breathing; when about three or four inhalations of gas are inhaled, open the air valve and allow one inhalation of air; repeat the same two or three times at short intervals as you note hard or abnormal breathing, or slightest signs of cyanosis, and when the patient starts to breathe normally and rigidity sets in, you will know that you have a full surgical anæsthesia.

Quite a few enthusiasts of ethyl chloride and somnoform strongly object to N2O on account of possessing the objectionable features that gas has, such as producing rigidity, cyanosis, and the first stages of asphyxia. Let me tell you, gentlemen, that for the extraction of teeth these disagreeable features are of some advantage, namely, when the muscles become rigid.

- 1. Your mouth prop remains firm in the position you have placed it.
- 2. The patient can never swallow any blood.
- 3. The lower jaw is firm when force is to be used.
- 4. Cyanosis is that first gentle reminder that you are at or near the danger mark. Asphyxia calls your attention to the full danger, and warns you to remove the inhaler. The above-stated symptoms will certainly verify the fact that you cannot overdose a patient with N2O, whereas with ethyl chloride or somnoform in the hands of the inexperienced, it may occur; to this nausea and headaches are ascribed.

THE ADMINISTRATION OF NITROUS OXIDE AND OXYGEN

To administer N2O and oxygen it does not require a complicated apparatus, but what is wanted is good practical knowledge about anæsthesia. All the apparatus that are supposed to give the percentage of oxygen can only give it approximately, and the same percentage will not answer in all cases. The administration is started with N2O until symptoms of rigidity or slight cyanosis are noticed; these are the plain

signs that the system requires oxygen. Open the oxygen valve and you will at once notice the return of the normal color to the patient, and later on you guide yourself by the condition of the patient, adding N2O with a small quantity of oxygen, as required. Bear in mind that too much gas will produce cyanosis and too much oxygen will quickly revive your patient.

THE EXTRACTION OF TEETH

For the extraction of the ten upper and lower single-rooted teeth, excepting the first bicuspid, use forceps with thin, small, alveolar beaks, bayonet shape. I use the S. S. White upper alveolar No. 65, as forceps with heavy beaks cannot be pushed up high enough. Make your rule to force your forceps as deeply as possible, and by doing so you will reach the thickest part of the root, and same will slide in your forceps very easily; the rotary movement should be used only on the upper two centrals, as the rest of the teeth may have roots turned in abnormal direction. When teeth are overlapping, I use first the mechanical separator and put in between a flat toothpick wedge. You will find this of great value, as it prevents chipping the neighboring tooth. In the extraction of upper and lower molars you should guide yourself by the following rule: Once the decay has involved the pulp chamber and the walls are in a weakened condition; do not use the regular molar forceps, but instead go right ahead with the alveolar forceps, disregard the crown entirely, and your effort will be rewarded at least with two roots, the palatine and one buccal; or in many instances you will get all three, whereas with the clumsy molar forceps you will only break down the crown, a free flow of blood will follow, and nothing will be accomplished. For lower molars use the S. S. White No. 85 alveolar forceps and go direct for the posterior root, as you will note that the posterior roots of lower molars are more or less straight. If any curving, you will find same always in the anterior roots of the tooth. Once one root is removed the other can be extracted with ease.

LOWER THIRD MOLARS-WISDOM TEETH

In extracting lower third molars, the extractor must certainly use wisdom, energy, and at times abnormal force, to attain success. It is a tooth that every extractor will treat with a great deal of respect. Being in a normal position, for some reason they are subject to early decay, but owing to the fact that the wisdom teeth erupt at the age when all the rest of the teeth are already in position, the location being

at the thickest part of the jaw due to this resistance and lack of room, the lower wisdom tooth can be found in all kinds of positions, and therefore become impacted. Practically speaking, they can be divided into three classes.

Class 1 are wisdom teeth covered entirely with gum; having room and straight normal roots they will cause an abscess through some small opening in the gum through which an infection will take place, the same being a pocket; or at times the lower wisdom tooth will be delayed in eruption and the upper will grow to its full length, and the constant force of the upper wisdom cusp will cause a traumatic inflammation, which results in an abscess; in both cases the offending tooth should be removed.

Class 2 are impacted wisdom teeth lying semi-horizontally in the jaw, tilting toward the posterior surface of the second molar which renders their extraction difficult in any event, but one thing you can find in your favor is the age of the patient. I have observed in numerous cases in my practice that until about the age of twenty-five the bone will give, and you will seldom have to use either the drill or the chisel.

Class 3 are impacted wisdom teeth that are lying in a plain horizontal position; some are not visible, and can be located only through the X-ray.

Wisdom teeth that are only trying to cut through at the late age of thirty to forty are teeth that have been delayed in their eruption. You certainly must suspect that something is wrong, once a tooth is detained in the socket longer than the required time, and you will always find stubby or curved roots, bent in the direction where it will find least resistance.

The above-mentioned impacted wisdom teeth can be removed only by chiseling or cutting enough of the alveolar ridge, and we must look at it as a quite serious operation.

The patient will have to be anæsthetized with ether or chloroform, as such operation will take more than an hour.

In the extreme cases I also advise the removal of the second molar, so as to lessen the injuries which this operation would cause.

The post-extraction treatment of abscessed teeth is an absolute necessity.

You will all agree that no surgeon would open an abscess and discharge the patient as cured! The case has to be treated until all sluggish parts are granulating nicely, by curetting and irrigations. Establish a free and clear drainage; to neglect these cases may lead to necrosis of the jaw or to a general infection.

A FEW HINTS IN EXTRACTION

1. Never remove the mouth prop until the patient is fully out of the influence of the anæsthetic, as it is a physical impossibility to swallow while the prop is in firm position.

2. If upper and lower teeth are to be extracted, start from the lower jaw first so that the flow of blood from the upper jaw will not interfere with your extraction.

3. At the time you extract an abscessed tooth, and when the so-called "gumboil" is developed, open same while extracting the tooth, as the absorption of the smallest quantity of toxin may cause constitutional disturbances. I use for this purpose fine manicuring scissors, as you will find they work to better advantage than a lance.

4. Examine every socket carefully after the extraction, remove loose-hanging gum and débris, also when the gum has been cut through, in the front teeth especially, pack same loosely with gauze to prevent one edge looking north and the other south, so as to have both edges in contact, and healing will be quicker.

5. While extracting a tooth or root with pericementitis, use every effort to have the roots out, as an abscess of a severer character will follow, due to the additional irritation, and patient is always under the impression that your attempt to extract is the cause of the abscess and not the infection of the offending roots.

6. If an apical part of a root is broken off it is useless to use forceps, but instead drill same out with a bur.

7. Elevators are to be preferred against forceps in the extraction of deep-seated decayed roots, as with these instruments you will cause less injury to the gum and alveolar ridge.

8. While extracting the six-year lower molars, in children between seven and nine, be careful not to apply too much force on the lower jaw, as the temporary canine is in position, and the permanent canine and the two bicuspids are in process of development, so that the jaw at that particular part is very thin and is easily fractured.

9. In the extraction of the first and second lower bicuspids, when compelled to go over the alveolar process, bear in mind that the mental foramen through which the inferior dental artery and nerves pass is very close between these two teeth.

10. Be always prepared for an emergency; have a tongue forceps and powerful stimulants, such as: Nitr. glycerine, strychnine \(\frac{1}{50}\) of a gr., arom. spt. of ammonia and brandy.

11. Hemorrhages are another cause of trouble to the dental surgeon. I will give you here what you may call a specific: Take one

ounce of trichloracetic acid, one ounce of menthol (they are both in crystal form), and just add a little creosote to dissolve the above-named crystals, and you will have one of the best and quickest acting styptics you could desire; dip your gauze in it and pack the socket. It is one of the strongest blood coagulators I have ever seen.

The same preparation can be used in sockets, after the extraction, to stop the pain. I have left packings for about six or seven days, and to my surprise I have found instead of a burned base fine, healthy, granulated tissue.

I cannot recommend too highly Dr. Buckley's Euroform Paste, which consists of even parts of europhen and orthoform, to which liquid petrolatum is added so as to form a paste; if same is applied to painful sockets after the extraction it certainly relieves the pain.

12. I shall presume it is needless for me to remind you about the very important fact that all instruments should be thoroughly sterilized, as on asepsis depends the success of minor or major surgery.

IN MEMORIAM

RESOLUTIONS BY THE ODONTOLOGICAL SOCIETY, NEW YORK, ON THE DEATH OF

DR. SAFFORD GOODWIN PERRY

Born at Wilton, N. Y., in 1844; died in New York City, December 21, 1911

As a charter member of the New York Odontological Society, and as its president for three years, the name of Dr. Perry is closely woven into the history of this society.

Always a believer in the usefulness of the dental society as an institution, he had given unselfishly of his time and energy to promote the interests of this organization from its inception to the time that its activities were discontinued in 1911.

The prominent position occupied by the Odontological Society and the international reputation it enjoyed as an organization, that stood for all that was best in the science of art and dentistry, were due largely to the loyal and untiring efforts of the member we now mourn.

Several of his splendid essays were prepared for this society, presented at its meetings, and now form a part of its archives. When

the subject of discontinuing active work in the Odontological Society was under discussion, Dr. Perry expressed much regret that a society which had been so useful, and through which so much good had been done for the profession, should be disbanded.

He urged that the members be not hasty in reaching a decision, and expressed the hope that the organization would maintain its integrity, even though its active work was over.

Dr. Perry's gentle and kindly manner and his keen sense of justice made him a respected executive, as well as a popular member in the ranks. His sympathy with the young man in dentistry and his uniform courtesy and generosity in all his relations with them had endeared him to hundreds who will always remember him with gratitude.

As a lecturer on the Faculty of the Dental Department at the University of Pennsylvania he was always warmly welcomed by the students. His keen sense of humor and a ready wit made his lectures interesting and entertaining, as well as instructive, and his youthful spirit drew his hearers to him and made them feel that he was one of them.

Dr. Perry's essays on dental topics stand out preëminently as examples of scientific and literary attainment, and his other writings, including prose and verse, give evidence of unusual gift and much cultivation.

In recording the death of our beloved fellow member, it is resolved by this society that dentistry as a profession loses one of its most useful and respected men.

That the dental profession in New York loses its best beloved member; and that the Odontological Society now mourns one of its most loyal and devoted followers.

It is further resolved that this minute shall be spread upon the record book of the society, and that a copy shall be sent to the family of the late Dr. Perry.

WILLIAM JARVIE, HENRY W. GILLETT, WILLIAM D. TRACY.



ANOTHER LETTER ABOUT THE BABY BORN WITH THE FILLING

The July Dental Digest carried a report that the baby of a patient of Dr. L. L. Zarbaugh had been born with what appeared to be a filling in a lower right second temporary molar.

The newspaper report and a very candid and sensible letter from Dr. Zarbaugh was printed. Here is a second letter from Dr. Zarbaugh, accompanied by the radiograph reproduced here.

Until a chemical analysis of the material in the "filling" is had probably no really conclusive decision can be reached.—Editor.



Толеро, Оню, July 8, 1912.

GEORGE WOOD CLAPP, D.D.S., New York City.

DEAR DR. CLAPP:

Well, it's metal, as is shown by the enclosed radiograph.

The arrow points to the tooth that the mother maintains was filled by "nature"; the tooth just back of it, I filled when the boy was first presented to me for treatment.

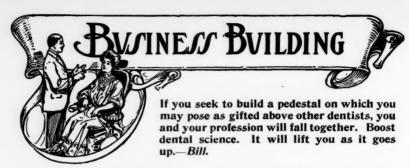
I examined the "nature" filling again last week, and tried to remove it, but could not.

The nearest thing that I can compare it to is moss or sponge gold in texture, but it is jet black.

I suppose that we will have to wait until the tooth is shed, and then if I can prevail upon the mother to allow me to turn it over to a good chemist, he can surely throw more light on the subject.

Yours very truly,

LYMAN L. ZARBAUGH.



THE COST OF CONDUCTING A PRACTICE AND ITS RELATION TO THE INCOME TAX

By Dr. W. I. Macfarlane, D.D.S., Tomahawk, Wisconsin

Perhaps a better title for this paper would be "The cost of conducting a practice used as a basis for arriving at a solution of the fee problem."

For the past three years I have been trying to keep an accurate account of the cost of conducting my practice, and I have read with growing interest each and every article that I could find that had a bearing on this question.

Previous to our last meeting I made an outline of some of the points that I wish to bring out in this paper and with the idea of securing some information from each and every one of you, that ought to be of assistance to me in completing my paper, I had some cards printed and handed them around with the request that you fill them out and return them to me at the close of this paper if possible, and if not, then as soon as possible.

I passed out about twenty-five cards, and out of the number five were returned to me, one the same day and four within a week. I suppose that each and every one of the remainder of that number now reposes in the pigeonhole of some good doctor's desk.

The various amounts given for the year by the five who were kind enough to go to the trouble of returning the cards are as follows: \$600, \$669, \$900, \$1,000, and \$1,369.31. These cards were given me about six months ago, and you gentlemen had not at this time given much thought to the income-tax law, and I feel sure that I am safe from contradiction when I say that at least 70 per cent. of those now present had to make a guess at their deductions when they made out the tax return for 1911. Perhaps as a result you paid a tax on money that you really used to pay expenses with.

A friend of mine who was a classmate and who is now practising in another state told me that his income was \$7,000 for 1910. He said

that he kept a strict account of every dollar that he took in, and with the system he used he could tell at any given time of the year just the amount of business he had done to date. I asked him what his expenses were, and he said: "Well, I do not know. You see I pay my bills as they are sent to me and do not keep any account of the total amount. It saves me the trouble of keeping a set of books."

Now, gentlemen, if he lived in Wisconsin, where would he be when he filled out his income-tax return? Perhaps just where some of you were when you scratched your heads and wondered where a good share of your 1911 income had disappeared to.

Perhaps if I tell you how I disposed of some of my cash it may help you to remember where some of yours went to. A large number of papers have been written and published in regard to the fee question and what income a dentist should receive for the services he renders. But I fail to see how we are going to reach an intelligent conception of what a just fee should be or what he should consider a proper income until we are in a position to know exactly what it costs us to conduct our practice. I realize that location and circumstance influence this cost in a marked degree, but it certainly is possible to reach an intelligent estimate of what your services are worth to your patient, regardless of location or circumstance, and this added to the cost per hour of conducting your practice will give a just fee for both patient and dentist, and in this way we will receive an income that is rightfully ours. It seems to me that if our colleges would give their students some instruction along business lines, they would be rendering them one of the most beneficial services that it is possible for an institution to give a student.

A great number of young men who graduate and open offices of their own were formerly boys who were either high-school students or who were employed as clerks, office helpers, farm helpers, etc., and they either had no income at all, or, if they received a salary, it was a small one; and when their dental practice brings them in a gross income of \$100 or more a month they get the idea that they are making lots of money, forgetting to deduct the cost of conducting the practice. Of course it is easy to get the idea that we are making money if we receive several hundred dollars a month in fees and have no definite idea of the amount that we have passed on to those we buy from, no matter whether we buy materials, service, or the use of an office.

As I said before, a great deal has been written and published during the past year or two regarding fees and the amount of income that a dentist should receive for his service, but with a very few exceptions each and every article that I have read has been lacking in what I consider the most important point of all; in fact, the very foundation principle has been made prominent by its absence. This point may have been ignored for various reasons, but whatever the cause, the fact remains that unless we have an intelligent idea in regard to the amount of money required to conduct a dental practice, we cannot arrive at an intelligent adjustment of the fee question which will be honest and just to both patient and dentist.

It is beyond my comprehension why a body of men, who belong to a profession that is as scientific and up to date as dentistry is, and that are doing as much positive good as we are doing, should be so blind and indifferent when it comes to the actual financial cost of conducting their practice. I feel sure that I am safe from contradiction when I say that there are not one half dozen of you who hear this who can make a positive statement as to the exact amount that it costs you to conduct your practice during the last twelve months. In fact, I feel sure that there are not ten who could state within \$50 the amount it cost them, and a lot more would do well if they guessed within \$100 of the total amount. This was written before you filled out your blanks. It may not hold true in the next twelve months.

Now if this is true, and I feel sure that you will find it is, if you will keep a strict account of all you pay out during the next twelve months, how are we going to adjust our fees so that we may receive an income which is sufficient to pay the running expenses of our practice and leave us a balance that will represent a fair salary in return for our skill, labor, and knowledge? The answer which I have to offer is as follows, and is what I have been doing for the past sixteen months. Keep an expense book and enter the names of each individual or company with whom you do any business whatever. Then keep a tablet of scratch paper on your desk, and whenever you pay out any amount, no matter how small, if only the price of a box of matches or a stamp, jot it down on your sheet, and every day or at the end of each week either have your assistant enter these items in the expense book or do it yourself.

In the matter of stamps, I have a box in which to keep them at the office, and buy a certain number at a time and charge that amount to expense account. This saves quite a little bother. Then I have a postal scale, and we weigh the dental merchandise that we send out and know what amount it will cost before we go to the post office with it. In this way we can charge the postage to expense account when we are making up our mail in case we do not have stamps of the larger denominations in our stamp box. It will surprise you when you know what your postage costs you for a year. Also the same in regard to postal

orders. I remember an instance which occurred several years ago, before I tried keeping an account of office expense. I was trying to estimate the cost of various items for the office, and I estimated the cost of postage and express at one dollar per month for both. When I give you the total cost of postage and express for the past twelve months you will see how far I missed my guess. And right here I want to try to impress upon you the fact that we have been making a great mistake in trying to adjust our fees upon a system of estimates which are at least very poor guesses.

Another thing that adds to the cost of conducting a practice is the habit that most of us have of buying in small quantities. To be sure, there are some things which it may be best not to try to keep on hand, but there are many articles which can be bought in quantity, and by so doing we can save a considerable amount, as you will find when you total up the various amounts at the end of the year. It is not only possible to save by this method, but we are able to make a double saving if we will open a deposit account on a 5 or 10 per cent, discount basis, and then when we order against this deposit be careful to buy so we may take advantage of the quantity rates. Supposing you buy five ounces of alloy. At \$1.50 per ounce, in single ounce orders, you pay \$7.60, \$7.50 for allow and ten cents for stamps used in ordering, five orders at two cents each. On the other hand, if you buy the five ounces in one lot you pay \$7, and then if your deposit is \$25, you get 5 per cent. more, which makes your alloy stand \$6.55, and if you buy from your supply man, you do not have postage to pay, so you have made a clear saving of ninety-five cents on only one item, and surely you could not earn almost a dollar any easier. If you have a deposit of \$100 you save \$1.30 on this item. It seems to me that in careful buying we have one of the best methods of reducing the cost of conducting a practice.

During the past twelve months, from October 1, 1910, to October 1, 1911, it cost me \$1,716.01 in each to conduct my practice. I do not work Sundays, and I had twenty-four days vacation, so that left me 289 working days, which would make an average expense per day of \$5.94.

My office hours are from 8.30 a.m. to 5.30 p.m., or eight hours per day, so you see it cost me seventy-four and a quarter cents per working hour to do business during the past year. Now, when we have it down to this point I want to call your attention to a matter which a good many overlook in regard to treatments. Can you afford to spend ten, fifteen, or twenty minutes of your time, perhaps several times a day, in stopping toothache or listening to some patient tell you about what

fine teeth their grandfather had, or "What an awful hard time Dr. So and So had to get out a double tooth and how he almost broke my jaw in doing it," etc., if it costs that much per hour to listen? I do not feel that I can, and so I am making charges for treating toothache which has nothing whatever to do with my fee for inserting a filling in that same case. And in the other case I simply ask to be excused, and remark that I expect another patient soon and must hurry.

The following items will show how the year's expense is distributed:

Assistant. Electricity. Postage.

Rent. Replacing Instruments. Laundry.

Insurance. Drugs. Laboratory Account.

Cleaning Office. Denatured Alcohol. Office Coats.

Heat. Gold Account. Gasoline.

Express. Washing Linen. Magazines and Papers for Oil. New Equipment and Waiting Room.

Dental Supplies. Furniture.

The total amount of postage for the year was \$41.36; the express was \$10.60; postal orders, \$3.17—a total for the three items of \$55.15. In this paper I have only dealt with the actual cash expense, and have not tried to count as expense the interest which we should receive on the principal that we invested in our education and office outfit. In making our charges we should not lose sight of the last-mentioned item. And another thing which brings up the cost is poor collection. Every hour which I gave my patient during the past year represented practically seventy-five cents in cash, and if I spent five hours in his service and received no fee in return it simply means that I made him a present of \$3.75 in cash besides my time which, at a low estimate, should be worth \$2 per hour. If I fail to collect, it amounts to \$13.75.

I only wish to touch lightly on the side of the question, for that I feel will take care of itself if we can only gain a clear knowledge of the facts concerned in the cost of carrying on our practice. If by this paper I can stimulate a good discussion and arouse your interest I shall feel that I have accomplished a great deal.

However, before closing, I think that a few words in regard to the investment we have made in education and office equipment might not be out of order. In making out your income-tax return on form 1, page 2, number 16, what did you figure your equipment was worth? Unless you know exactly how much you have tied up in your office outfit and instruments you cannot get the correct sum for depreciation.

If your depreciation is not what it should be you are paying a tax on money that should be exempt. My inventory shows \$1,408, and I made a charge of 10 per cent. for the year, so you see that amounts to quite an item.

Of course I realize that 10 per cent, on a dental outfit is a low figure for depreciation, but I figure 10 per cent, on the balance each year the same as a banker does on his bank fixtures, and if the outfit lasts long enough it pays for itself in that way.

Now, my expenses while at college were \$1,500, and I have \$1,400 tied up in my outfit, and besides that I spent about twenty-one months of time in school for which I received no pay. And I certainly could have earned \$40 per month during those months, so you see that I have at least \$3,748 invested in education and equipment, and it does not seem any more fair to expect at least 6 per cent, interest on that amount, which interest would amount to \$224.88. Now I think it would be fair, although I did not do it, to add this amount to the cost of conducting my practice. In this case it would bring my total up Now if I were to charge \$2 per hour for my service to \$1,940.89. without any idea of what it is costing me to continue in practice and work eight hours a day, taking out Sundays and twenty-four vacation days, I would receive \$4,624, and have an idea that I was receiving almost \$400 per month for my services. But after I deduct \$1,940 from this amount I find that all I received was \$2,684, which is about \$224 per month, or about \$1.16 per hour. And at that it costs eighty-four cents per hour to conduct my practice. Now, gentlemen, I did not always receive \$2 per hour for the services I rendered my patients, and as a result I did not receive an average of \$1.16 per hour for what I did. This gives me a chance to touch on one thing more, and I hope that Dr. Lyons will give me some light on that matter when he reads his paper. It is this: A good many of us will spend an hour cleaning a set of teeth and only charge \$1 for it, when we certainly should receive at least \$2, but because the other fellow only charges \$1 we do. If I do that sort of thing and it costs me from seventy-five cents to eightyfive cents an hour to pay running expenses I receive the magnificent balance of from sixteen to twenty-five cents for the work I do. And that being the case I feel like an Irishman I heard about.

A mutual friend was asking Pat and his Scotch friend what they would be if they were not Irish and Scotch respectively. The Scotchman said he would be an Englishman, if he were not Scotch. But Pat said he would be ashamed of himself if he were not Irish.

And I also feel ashamed when I realize that it may be possible that at times I have exchanged my services for such a fee.

Another item of expense that I have not included, and which is perfactly legitimate to include, is accident and health insurance. Physical fitness and health are, as a merchant might say, a large part of our stock in trade, and it is good business policy to protect that stock with accident and health insurance, and this being the case it should be charged to the expense of conducting a practice and added to our deductions when we send in our return to the assessor of incomes.

MENTAL LAW OF SALE

By F. R. Masters, D.D.S., Wilmerding, Pennsylvania

The mind of the patient must give favorable attention, interest increased, and desire brought to a white heat in order to get favorable action. All this is done by the use of analysis and synthesis in your selling talks. You must also know the best way to render your services, yourself, your patient, and be acquainted with the various forms of language and figures of speech.

In the first selling talk the introduction is so arranged as to get favorable attention, and is designed to carry the mind of the patient through interest, desire, and action.

Should favorable action not result, the second talk is so arranged as to increase interest and carry the mind through desire to action.

If no favorable action is secured by this time, the third selling talk is so arranged as to bring desire to a white heat, so that favorable action will result.

There is no right selling unless there is a profit to both buyer and seller.

Confidence must permeate every step in the mental law of sale.

Satisfaction will follow if excellent services are rendered and a permanent *clientèle* established.

The individual is the architect of his own business. The individual must be right if any profession or business is to win. The individual must rise to the highest point in the attainment of ability, reliability, endurance, and action.

The more points at which you touch humanity, the greater your influence.—Elbert Hubbard.

GETTING RIGHT DOWN TO BRASS TACKS ON THE SUBJECT OF DENTAL BUSINESS*

BY GEORGE WOOD CLAPP, D.D.S., NEW YORK

PART I

Even if you don't agree with the statements in this article, you might better read it, because in his discussion of the paper Dr. Van Horn says that what I say isn't so, and he protests in the name of the profession against many of the statements.

Dr. Van Horn's protest doubtless voices the sentiments of many members of the profession. This is most natural because it is only recently that we have dared to discuss these matters as plain every-day business men would discuss them.

In order not to become tiresome, the paper will be published in three sections and will be followed by Dr. Van Horn's discussion and my reply thereto.—Editor.

A DENTIST is a professional man to the patient of the moment. To everyone else, including himself, he is a business man. And the success with which he meets the conditions of life, with which he masters its comforts in the present and provides for them in the future, is dependent more on business than on professional ability.

In stating such a radical proposition, it is very important to get our definitions just right. For our mental comfort, there ought to be a sharp line between a profession and a business. The line is not so sharp as we might wish, but if we accept the definitions of The Standard Dictionary, we shall be able to make a sufficiently sharp differentiation for our purposes. That dictionary defines a profession as "an occupation properly involving a liberal education or its equivalent, and mental rather than manual labor. More especially the three professions, religion, medicine, law." The definition of a business says nothing about the liberal education or its equivalent. It reads: "A pursuit or occupation that implies or requires energy, time and thought. A trade, profession or calling."

So here you have the difference. The profession demands the exercise of the special knowledge which the liberal education has given you. The business requires the application of common sense, thought and energy. The abilities necessary for the pursuit of business are the fruit of practical experience rather than of any special training.

An address of this sort is always exposed to one great danger—it is that those who hear shall carry away the thought that the speaker

^{*} Address delivered at the forty-ninth annual meeting of the Susquehanna Dental Association of Pennsylvania, at Wilkes-Barre, Pa., May, 1912.

emphasized one side of his subject at the expense of another. In this particular case the danger will be that you may get the impression that I want you to be good business men at the expense of the professional side of the practice. Nothing could be further from my intention. No attitude of mind on your part could be more wholly false to yourself and your profession. Every worthy motive calls on you to be the best trained, the most skillful and the most conscientious dentist that it lies within your power to be.

Nor do I want you to elevate yourself at the expense of the profession, though to tell the exact facts, you cannot permanently and truly elevate yourself by belittling your profession. You are no genius on whom a revelation from Heaven has directly descended, conferring skill unknown to other men. You know a little something about the mouth and a tiny bit about the body because hundreds of other men have given their best time and thought to seeking these things out and have then generously placed them at your disposal. If it hadn't been for what others have done, you would still be like our distinguished patriot, Paul Revere, who was a dentist, as well as some fifteen or twenty other things, each in turn.

I have gone to the extra pains to say all this because I want you to understand that you cannot properly exercise your business ability at the expense of your profession. For the dentist who fills the column of the paper with the claims that he is not as other dentists are, and that he can do things unknown to the other dentists, I have but slight respect. The statements probably aren't true. And if they are, he should pay some small part of his debt to the profession by showing other dentists how to do these things.

But when all is said and done, you are a business man to every one except the particular person needing your services. The moment before the patient engages you to do her work, you are a business man. The moment you cease the operation and she leaves the operating room, you are again a business man. Business follows you to the threshold of your operating room. It lies in wait for you the moment you cross that threshold, coming out.

Your standing in the community, the standing of your family, the clothes they wear, the home they live in, the schools they attend, are all dependent on the exercise of your business bility.

The proper position of business in the practice has in it nothing to alarm the most conscientious dentist. For in the really successful dentist, good business ability and good professional ability go hand in hand to round out the career. You have often heard a quartette sing some delightful music. You have enjoyed not only the melody

which resulted from the combination of the several parts, but have enjoyed tracing each part as it wound in and out of the whole.

If you were to examine the music carefully, you would find that no one singer sang the finished tune as you heard it, but that the several parts blended to produce a result. So it should be in the practice of dentistry. The practice of dentistry is not wholly professional nor wholly business. But in proper proportions they blend to produce the man who is doing good dental work, for all the people he cares to serve; who gets remunerative fees for such work; who enjoys and whose family enjoys the good things of life in proper proportions, and who is making preparation for the incapacity of old age. On such a man the cares of life should not rest with crushing weight. He, if anyone, is entitled to enjoy life as he goes through it.

(This article is expected to be continued in the September number.)

DENTISTS AS BUSINESS MEN

Every good dentist, nowadays, is a teacher as well as a dentist. His business is to inform his patient how to get along without him.

Dentists, for the most part, are not sufficiently paid for their work. They are not good business men. The first thing a dentist should learn now is how to charge.

Think of a lawyer sending you a bill for \$7.50, as my good East Aurora dentist did for me last week!

I admire this East Aurora dentist. He is a right manly fellow, but he does not impress me the way my Buffalo lawyer did a short time ago, when he sent me a bill in blank and said, "Fill this out for anything that you think just, right and proper."

To preserve my self-respect, I had to write in his fee in six figures. —The Fra.

Men do not succeed by chance. Chance may put you into a position of power, but if you do not possess capacity you will never hold the place.—Stephen Girard.

EXPERIENCES

WHAT WOULD YOU DO WITH THIS CHILD?

The writer says truly that it is easier to prescribe than to fill the prescriptions. Here is a practical case. What would you do if it were yours?—Editor.

Editor Dental Digest:

What are we going to do with a child just eight years old, with her four permanent molars decayed so badly that the pulps are exposed in all of them? At this age the roots are only three fourths developed and the application of arsenic is a dangerous procedure. I sealed creosote in with cotton and sandarac varnish which relieved her toothache, and the next day intended to seal creosote in with cement, but she became so hysterical that she fought, knocking the cement and spatula across the room, and getting out of the chair fought her way to the door. She admitted I had caused her no pain, but it was impossible to do anything for her. I was unable to remove any decayed dentine, but expected the creosote in time to kill the pulp. Of course her mother wanted the offending molar extracted, but I have convinced her that it should be treated and filled, if only with cement. Her mother became angry at the girl and told her the old story that she would not get up at night to try to stop her toothache.

It's all right for you big dentists with lucrative practices to say "Educate your patients," but they do not practise on a bunch of ignorant Swedes and Germans in a poor neighborhood. I have this kind to deal with, viz.:

A Swede boy of twenty-three years had two molars and two cuspids in the upper jaw and wanted to know what should be done. I told him I could make a 14-tooth bridge for \$25 and he nearly fainted, but asked how much for a full upper plate. I told him \$10 for plate and \$2 to extract the remaining four teeth. He said, "Go ahead, it's cheaper"; so I extracted the four good teeth and made him a plate. Think of it, a full upper plate at twenty-three years of age! I spent over half an hour talking to him about the bridge, but to no good.

I do no gold inlay work. Why? Because these people wouldn't pay \$6 to \$8 for a gold inlay when a "silver" filling is only \$2 to \$3. I have tried for ten years to educate my patients, but find they do not want to be educated.

It's my duty as a dentist to tell the people what should be done, and if they won't do it my way I do it their way, but inform them I'll not be responsible for the work. If any reader can tell me what to do with this eight-year-old girl who will not be reasoned with I will be thankful.

F. R. M.

Editor Dental Digest:

Thanks to "Brother Bill" we have started a local dental society here, with all the dentists in it—and as there are only six dentists, we have just a President and Secretary, who keep the "kitty."

Now, instead of cutting each other's throats, we all drink out of the same bottle and take Thursday afternoon off, don't knock each other's work, and stick to an agreed minimum list of fees, charge \$1 examination fee to stop shopping, and, believe me, it does the trick. For the old gag about the camel and the needle isn't in it for a minute when it comes to separating a York County farmer from his shekels.

We would be glad to see any of the fraternity. It makes a nice trip to St. John from Boston by boat, and there up the river 64 miles to here, and this country in the summer months makes the "Garden of Allah" jealous.

BY agreement among Fredericton dentists the fee for dental examination shall be \$1.00, this amount to be credited toward payment for any work which may be done as a result of consultation.

The above card hangs in front of the chair and also hangs in reception room.

A. T. M.

Editor Dental Digest:

I AM so well pleased with Brother Bill's Letters and other good things in the DIGEST that I wish to express my appreciation and thank you for the help your journal has given me.

I feel I can handle the Service-Selling Talks and Brother Bill's Ideas very well, but on top of that I want some system by which I can get the money. My terms are cash, and I have a large "Terms Cash" sign in front of my chair, but regardless of that fact, many strangers get the best of me after the work is finished by saying they "forgot to bring the money" or some of the thousand similar excuses. Now, what I want and what many other dentists want is some sort of a paper for the patient to sign which will make us certain that we will receive our fee—some time.

Furniture and piano dealers have a lease that customers sign and makes the merchant fairly secure.

I have been using the *check* system on patients who fail to have the cash, and it works very well in nine out of a possible ten cases, but there is certainly some better system, and I want a better one.

In talking to a brother dentist about this he said, "Oh, we are expected to lose a certain per cent. of accounts," and that may be a fact, but I can't see why it should be so.

My system has been to have a patient sign a check for the amount. Whether he has money in bank or not I get the check and date it according to the time he promises to pay. Then on the date his account is due, if he does not come in and pay, I present check at the bank. If he has no money there I give him notice that I hold a bad check with his name to it, and according to our West Virginia banking laws he is in a serious position. As I said before, in nine cases out of ten he will come running to me with the money to lift that check. But in a few cases I have been unable to collect even with the bogus-check method, and I want a better one.

Perhaps some dentist will be able to assist us with a method of collection.

What I want is the *cash* for my time and services—or some *binding* agreement to make collections sure.

D. M. S.

Editor Dental Digest:

I would like to offer a suggestion. In the majority of articles dealing with the business side of dentistry your correspondents tell us to collect every dollar for our work and give us some general rules to follow, but do not go into particulars. Now, many practitioners are absolutely devoid of any knowledge of business, and it would be very helpful to them if a few of the men who have been successful in the business part of practice would give *verbatim* their method of approaching a patient in regard to the matter of payment.

I have a system that works fairly well. When a patient comes for the first sitting I examine the teeth thoroughly and tell her the actual cost; then I do some minor treatment, and on dismissing patient approach her something like this, "Now, Mrs. Smith, this work will amount to \$25; as you understand my terms are strictly eash, I would like a payment of about one half of the amount to-day, and I shall expect the balance when work is completed." If it is inconvenient for the patient to pay the amount asked, I inquire as to how much can be paid down. If only \$5, then I explain that I shall expect a payment at each sitting until the work is finished. But in spite of all these precautions, they often manage to get away from me for an unpaid balance, and that is the part I wish to cover and find whether there is any way to get around the matter so that I can get the balance due and still retain the friendship of the patient. W. E. S.



HAVING THE COURAGE OF YOUR CONVICTIONS

MY DEAR JIM:

I'll never forget the day when I stood where you stand now; the memory is too deeply graven on my mind for forgetfulness. You say that you have given careful thought to all that I have written you regarding the necessity for getting remunerative fees, and that you are convinced it is right. But you lack the courage to put your convictions into effect. In other words, you do not dare charge such fees.

You outline your position from your viewpoint. You speak of the number of dentists in your city who are working for as little or less; of how anxious they are to obtain patronage; of how low the fees have been there for twenty-five years past; and of the fact that if you try a thing of this sort and fail, it may condemn you to move somewhere else and start all over again. It is these conditions which sap your courage.

All that you have written is true. But so much that you have not written is just as true, that I want to present to you the other side of the matter. While you think of this side, I want you to forget all the drivel you may have heard on this subject at society meetings, and sit alone, face to face, with your own present and future. This is a mighty important matter to you and those dependent on you. It may make all the difference between health and overwork, between comfort and poverty in old age. It may make the same differences to your family. It is really a crisis in your affairs; and in all such crises one is absolutely alone, no matter how many friends he has. You must fight this matter out in the battleground of your own mind. And when you have fought it out, you must generate the courage to follow the course of your convictions.

When I ask you to forget everyone else, I do not mean that I want you to forget that you are a professional man and owe a professional man's duty to the community. Nor do I want you to forget that you are a gentleman and owe a gentleman's duty to competitors and patrons. But I do want you, for a little while at least, to forget everybody else's opinion of your course.

Let me give you an outsider's view of your position. You are thirty-five years old. You started in practice at the age of twenty-five

with a small college debt hanging over you. At the end of five years you had a practice which kept you busy at the fees common to your community. When your practice became large enough to warrant it, you married the little lady who had proved her devotion by waiting so patiently. Into your home have come two children, so that you have four mouths to feed, not counting the hired girl. You have had a little sickness, with its attendant expense, but on the whole have been very fortunate.

For a long time you were content to live along from day to day, paying to-day's bills out of to-morrow's earnings. You looked forward to the day when every moment of your time should be taken, and thought you would then have no difficulty in saving a tidy little sum each year. You unconsciously grew into easier ways of living, as you handled more money. And in spite of the fact that your time is now full, you find it impossible to save money. The high cost of living, and the cost of high living make it impossible for the old sums to pay the bills. You have been looking more closely into the matter of accurate bookkeeping of late and find that your profits are much smaller than you thought. They are smaller than will support your style of living.

So you stand at thirty-five years of age a practitioner of skill and repute, father of two fine children and husband of a good wife, but with no protection between them and the future save your health and strength. You would not be troubled if you could be sure of being always spared to them and of being always vigorous. But three months of enforced idleness on your part would be little short of disastrous. And if the hand of death, which daily snatches some one from before your eyes, seizes you, you have not enough life insurance to carry them until the children are self-supporting.

You have tried to earn more money. Each year you have worked a little harder, developing greater speed. You have been at the office at eight o'clock in the morning and often till eight at night. Since you have been worried by these facts, you have worked for a few patients on Sundays, because you feared to offend them and lose their patronage if you refused. You are doubtless now at your maximum power. And you wonder what is to be the story of the future, if, with the children small, and all the family well, your best efforts only enable you to hold even.

You cannot tell me anything about such thoughts or the anxiety they bring. I've walked the floor with them in idle hours, and many a quiet hour of the night. They have sat like leaden weights on my heart and brain. And more than once they have made a coward of me, just as they are making a coward of you. But I've got something to tell you that no one told me. It is that there is an answer, a right answer, to these unworded questions and that hundreds of men in our profession have found that answer and the comfort it brings.

The reason I asked you to close your mind to the talk you hear on this subject at dental societies, is that I want you to consider first and alone, the duties you owe to the family for which you are responsible, and to yourself. Yes, I wrote it just that way, YOURSELF. That is the part you never hear treated by the men who write what they think you think they ought to write, instead of daring to write from life itself. You hear much about the public and your duties to it, and to patients rich and poor. And once in a while some writer slips in just a little mention of the dentist who is to discharge all these duties. And so I want you to shut the door on the outside world, the world of duties to patients and the profession, and consider your duties to your family and yourself. When we have settled these, we will open the door and let the world in again, only on a slightly different basis than before.

You will at once find yourself face to face with some facts of such pressing importance that before them most other facts seem small. First of all, you owe the wife and children a living for as long as they need it. You are responsible for that little lady being Mrs. Jim. You are responsible for the two youngsters whose pictures you sent me. They are not capable of proper self-support. And whether you are sick or well, living or dead, you are responsible for their support. Only sheer inability or rank cowardice will enable you to sidestep that responsibility. At present their only protection is your health and a little insurance. That isn't enough. There must be a reserve of some sort erected for their protection.

As the children grow older, their expenses will increase. They will require more clothes and more expensive ones. They will go to school. It is your desire to keep them in the walk of life in which you launched them. You started them there. Your home will be on that plane so long as you keep up the pace. And the formative periods of their lives will be shaped under these influences. You do not desire them to drop out of that sphere. You want the boy to have as good a position in life as you have, with possibly greater opportunities. That demands common school, high school, and college, and money, money, money.

Somebody has figured out that it costs \$4,000 to raise the average child to the age of twenty-one years. The average child does not get a professional education such as you wish the boy to have. And you may safely figure that by the time your children are twenty-one years old they will have cost you over \$10,000. Now sit down before a mirror

and bold up your two hands and realize that that \$10,000 must come out of the two hands and head you behold in the glass. I've done it. I know how it looks and feels. And much of this sum must come in addition to the ordinary cost of running the house.

But that isn't all, nor anything like all. By the time these children are ready for college you will be approaching the age when your physical powers will begin to decline. In all probability the age of



"Now sit down before a mirror and hold up your two hands"-

sixty years will find you physically less capable than you are now. Your income will be smaller. If it now merely equals your expenses, it will then drop below them. And the older you get the farther it will drop. And if there then stands between you and grim Want only the same two hands and head, the time will not be far distant when you must either live a stinted life or depend on your children. All that is merely another way of saying that in order to live in comfort at the age of sixty you must have a reserve which has been provided for that time.

I have a homemade idea that the years when the physical powers have passed their period of greatest exertion should be the happiest years of life. Much of life's toil and turmoil should be past. If the years have been wisely spent, there should be a little reserve fund for modest needs. There should be time for reading and thought and the cultivation of friends, things which are often impossible in the rush of middle life. These should be the golden harvest years of life; the years when you don't have to do anything important because you have been doing important things for years, and your share is done. But if you reach this period so devoid of funds that it is the time of self-denial, of want, and of waiting for death, you have missed what I believe to be the best of life. And a lamentably large number of the men in our profession reach that period in just that condition.

Let us then regard some things as settled. You must provide enough for the family to live in the present, additional funds in the future for the education of the children, protection for the family in case of your death or illness, and a competency to make old age comfortable. And you must do it out of your earnings.

How much time have you for earning these funds? You do yourself an injustice if you work at your present pace more than forty-eight hours a week for more than forty-four weeks a year. I know you can do more hours than that daily, and more weeks than that yearly now, but you will last much longer if you limit yourself a little. And you will postpone that age of disability if you take enough rest each year to repair the drain on your vitality. Not only that; you will get more out of life, and so will your family. You will know them better and they will know you better. And that knowing will enrich their lives as nothing else could.

On my schedule of forty-eight hours a week for forty-four weeks, you have not more than two thousand one hundred hours a year in which to earn the sums necessary for all these purposes. Broken appointments, etc., will probably reduce that to two thousand hours. You will find that an intelligent working basis.

You claim to know what it costs you to conduct your office, but do not tell me what the sum is. You say that last year it cost you \$1,900 for all your living expenses. Let us call it \$2,000 per year for living in the city where you reside. And let us set aside \$1,000 per year for saving. Maybe you cannot come quite up to that the first year, but it will make a good mark to aim at. That means that you must earn at least \$3,000 per year more than the \$1,200 or \$1,500 it costs to conduct your office. Add these things together and see what answer you get. You find that your practice must pay you a salary of \$68 for each forty-four weeks. You'll do better to make it \$75 per week, because your living expenses will increase later. It must also earn its own running costs of say \$30 per week. Then your practice must

collect not less than \$105 per week for each of forty-four weeks. This requires that you plan your fees on the basis of \$2.50 or \$3 per hour.

You may feel inclined to say that you get that, but you do not, or you would have the money. You may get it for an hour now and then, but you do not average it for all the hours, or anything like it. You do too much for nothing. You take cases at lump fees which turn out to be too low. I'll wager that you do not average over \$1.50 per hour. And perhaps you do not collect all that, or at least not till long after it should have been paid.

Right here there will come into your mind some of the things you have heard at dental society meetings about your duties to the community. The sum and substance of these talks will probably be that you should do your best for each patient for the smallest sum of money you can find it in your heart to demand. And you are to pay the balance in cramped living and perhaps in the bread of charity in your old age. That kind of talk is mere drivel. It is written and read by men who do not know even the elements of successful business. If they knew even the rudiments, they would see that they are all wrong. They have mixed business and sweet charity all up, and they have worked in the charity before there was any business to support it.

Of course you will do your best for each patient, for a consideration. And that consideration is to be proportioned to the skill involved, the cost to you and the worth to the patient.

You will have charity cases and will serve them well. But one of the great characteristics of charity is that it begins at home. And I want to say that if you rob your family in order that you may make a practice of doing dental work for less than it is worth, you are not charitable—you are a plain fool. And you will get a fool's reward. Mr. Bryan says that the difference between a wise man and a fool is that the wise man gets an idea in his head, but a fool gets it in the neck.

I suppose I shall shock you when I say that from your point of view dentistry is a business—a matter of earning a good living in ways agreeable to you. You took it up to make money. Pretty soon you ran across the fact that dentistry had begun as an adjunct of the barber's business, and that it passed through many stages of development, just as other professions have. You heard the stories of the days of private knowledge, of seclusion and jealousies. You heard men talk, to whom this stage of development was so real, that it is all of dentistry to them. They do not realize that practically every profession and trade has passed through just such development. And these men have so mixed the

stories of the past, their own notions of ethics and conceptions of professional duty, that they have made a sort of mental hash of them all. Worst of all, they have evolved a formula of action which often keeps them and their students poor all their days.

Why should your attitude toward the public be so different from the public's attitude toward you? Why should all the obligation be on your side? Why should you be so earnestly concerned about the public's pocketbook that you habitually work for less than remunerative fees and deny your family the very things the dear public loves so well?

What is the course of any ordinary transaction in which the public seeks service? The person desiring it seeks some practitioner in whose skill and integrity he believes, presents himself for service and expects to receive a bill in keeping with the circumstances. To be sure, some exceptions occur, almost wholly within the limits of the professions. The doctor will save your life for a couple of dollars, if one visit will do it. The preacher will marry you for whatever you think the job is worth. And the lawyer will save your estate—for the estate itself. But just because the preacher and the doctor often work for small sums is no reason that you must do so habitually.

On my last visit to your home you showed me the windows of a store which handles only the finest goods. Well-dressed people were coming and going. A couple of carriages stood near the door, and a footman waited there. You told me that your wife would rather have a dress from there than two from the store across the street because the best was cheapest in the end. You gave me a specific instance in the story of a coat for which she paid \$60, and which, after four years of wear, is still the admiration of many friends. I'll wager that you cannot think of any line of argument by which you can habitually buy at that store for less than a profit-bearing price. You are trying to sell service which corresponds with the quality of that coat. You need not sell it without a profit if you go about it right.

What is the attitude of the public toward you? It is merely the purchase of service, just as it purchases goods at a store. If the work isn't good, you hear from the purchaser shortly, and will doubtless be given the opportunity to make it good. And if you don't make good, the public will leave you to bite your nails while it patronizes some one who does good work. There has been an enormous amount of unnecessary fuss made over this responsibility to the public. It is part and parcel of your responsibility to your own welfare. And that requires that you do your best with every case that you undertake.

The public esteems all services at just the value which the exponents of that form of service place on those services. If the dressmaker places such a value on her services that she takes pains to educate each of her customers, and then drives that education home with a good stiff bill, the public of that place will rate dressmaking very high. They will give it attention and will make sacrifices to have the best and plenty of it. If the dentists think well of their services, and



"The story of a coat for which she paid \$60"

take the same course of public education, dentistry will be highly esteemed and the teeth of the people will receive attention. But if the dentists think so little of their work that they do not take the pains to educate their patients to proper appreciation of it, and if they hold their services cheap, it is but natural that the members of the community should have but slight regard for dental services, and should object to paying well therefor. It isn't the public's fault. It is the fault of the dentists practising there. If your patients have a low opinion of your services, it is your own fault.

But of all the foolish thoughts that can weaken your purpose at this time, the most foolish is that the dentist across the street is your competitor. I thought that way once. I thought that there was just so much business in the community, and that if I didn't get it, he would. Even if that were true, which it is not, it wouldn't mean competition of the kind which necessitated my doing it cheaper than he could afford to.

The fact of the matter is that there is more dental work waiting to be done than all the dentists in your community can do. It only awaits development by dentists who have sufficient business ability to bring it out. It is needed in the families of the poor and of the wealthy. Many of the defects which now go unattended are among the most serious of all dental defects. Hundreds of parents would be glad to have you outline these defects, as they present in their children, and correct them at remunerative fees. I have visited many communities, but I have never seen one in which half the necessary dental work was done for even those people who patronize the dentist most. You are not a competitor for a given small amount of business. You are a missionary bringing tidings of great joy to hundreds of people, and affording practical relief. You have such opportunities for building practice that no one can, in the language of the street, "beat you to it."

I know of an office building in which there are half a dozen dentists, who for some years regarded each other as competitors. Gradually the perception took root that they were not competitors and that they might much better be coöperators. The results have been beyond their dreams. Distrust has been removed from their minds and freedom has taken its place. They have so long conferred on cases that each different case is now given practically the wisdom of all. The men have developed enormously. The dentist who had the least practice and was most suspicious has developed into a specialist and helps and is helped by all the others. And the opinion has taken firm root in that city, that the most capable dentists are located in the Blank Building. This is possible in any office building where the men are broad-minded enough to see their possibilities.

You compete with another dentist only when you bid for work on the ground of price. And if you are doing that, you are so wholly missing your very best opportunities for practice building that I don't wonder you lack courage to raise fees. You have your own personality, your own touch, your own perceptions as to the needs of a given case and the means for benefiting it, and your practice should be absolutely individual. Patients will choose between you and the other dentist just as they choose between Marshall Field's and the ten-cent store. And to whichever place they go they expect to pay the price.

Do not understand me to say that you must go about the raising of fees violently. This is no tragedy with a stage set for the perform-

You are not required to thrust one hand in your bosom, run the other through your hair, advance two steps, bow and exclaim, "Madam, I find that I have been doing this work too cheaply; it will hereafter cost you twice as much." And if she says, "Why, doctor, I have always thought your fees pretty high," you cannot say to some slave in waiting, "Away with her to the dungeons," because if you treat her like that, she'll away to some other dentist, and it will be you for the dungeons before very long. But you can say, "Mrs. Jones, I want to give this case a little different treatment, if you will let me. It will cost a little more, but it will be much better and even cheaper in the end." And you can make a common-sense explanation of the fact that the value of dental work depends on the skill with which it is done. And skill means time and knowledge and care. Mrs. Jones may or may not accept your offer, in which case you will use your own judgment as to what to do. But pretty soon some other Mrs. Jones will accept it. And as time goes on you will get it across on all of them, and so easily that they will never know just how it happened.

To new patients you can quote new prices. But when an intelligent person asks why a price is high, or remarks that it is, do not hesitate to make a plain and gentlemanly explanation of your principle of work. It isn't the person's fault she doesn't know more about dentistry. It is the fault of the dental profession, of which you are a member. Maybe it is your own personal fault.

When the new fees become the rule in your practice, some of your older patients will probably leave you for the dentist who is still in darkness and who works for cost or less. That need not cause you the slightest uneasiness, because if you utilize one tenth of the practice-building opportunities which present in your own office, your time will be so taken that the loss will be unnoticed.

I'm not going to say anything about heroics. You are not poor because you are a martyr bleeding for his country. You are merely a sucker being bled because of his ignorance.

When I fought this thing out, long ago, I was filled with fears, fears of the other fellow, of the public, of the poorhouse. My feet were leaden and my heart was filled with trembling. But I was like some fellow of whom I have read, who said his greatest trials were those that never happened. The things I anticipated didn't come to pass. Matters went along pretty smoothly, with now and then a ripple on the surface. Patients saw the point and paid the fees. I saw the point and saved the increased income.

Your courage must come from your necessity. You must do your

duty foward the wife and little ones. You are a fool if you do it not to yourself as well.

Educate your patients. Make a co-laborer of your fellow-practitioner. Charge remunerative fees; and you will be a bigger and happier man and a much better dentist.

Here's to happier days.



THE TIDES

The ocean had, in days of yore, A very dirty, mussy shore From Newfoundland to Singapore.

When mermaids wished to go to land, To sit and sing upon the strand, They had to flop through slimy sand.

When Neptune saw this, it befell. He took his dolphin team and shell And sped away across the swell.

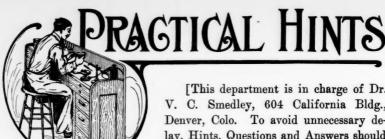
He went to every sea and bay, And gave his orders all the way From Greenland's rim to far Cathay;—

And now the tides rise up and roar, And twice a day they wash the shore From Newfoundland to Singapore;

And beaches lie all clean and fair, Where mermaids sing and take the air With tidy tails and streaming hair.

-"The Giant and Other Nonsense Verse," by Albert W. Smith.





This department is in charge of Dr. V. C. Smedley, 604 California Bldg., Denver, Colo. To avoid unnecessary delay, Hints, Questions and Answers should be sent direct to him.]*

GLASS-STOPPERED BOTTLES FOR VOLATILE SUBSTANCES.—When volatile substances are placed in glass-stoppered bottles the ground portion of the stopper should be moistened with glycerin. This not only makes a more effective seal, but prevents the stopper sticking.—Dr. ALFRED P. LEE, PHILADELPHIA, The Dental Brief.

CLEANING IMPRESSION TRAYS.—Immediately after removing the tray from the impression scrub it thoroughly with soap and sand, using hot water if wax or modeling compound has been used. This leaves the trays bright and clean, and if the habit is formed of doing it promptly the array of trays will be far more presentable.—J. T. B., The Dental Brief.

TEMPORARY STOPPING, WAX AND COTTON-WOOL .- Cotton-wool, or cellulose-wool with a drop or two of wax upon it makes an excellent temporary stopping when needed for a few days only. It is easily packed in and smoothed with a warm burnisher. It sets sufficiently hard, is easy to remove, and does not become foul.—Mr. H. J. Mor-RIS, SHEFFIELD, ENG., The Dental Record (The Dental Brief).

OXYPHOSPHATE OF COPPER FOR REFITTING DENTURES.—Dr. Pruyn, when called upon to make a denture in place of one worn in a mouth where the tissues are flabby, preparatory to taking the impression, spreads over the old plate oxyphosphate copper cement and presses it to place, holding it there until set. After removal, and smoothing the edges, he permits the patient to wear this for four or five weeks, and finds that the flabby tissues sink under the pressure and become firm. The new denture rests upon solid tissue, and is much more satisfactory. -Dental Review (The Dental Brief).

*In order to make this Department as live, entertaining and helpful as possible, questions and answers, as well as hints of a practical nature, are solicited.

Half Collar Cap Crown.—I do not believe that a thin platinumiridium collar, properly fitted onto a properly prepared root, will ever cause irritation of the soft tissues. They will, of course, if made too wide or forced too deep under the gum margins, or if so imperfectly fitted that the edges flare out from the root. I also believe that it is seldom necessary to make a whole collar for the anterior teeth. When the root of an upper incisor or cuspid is ground so that there is considerable of a shoulder on the lingual side, this shoulder can be used for a half collar lingually, giving a powerful grasp on the root and rendering splitting almost impossible, and if neatly fitted will cause no irritation.—Dr. Fossume, Dominion Dental Journal (The Dental Brief).

BLEACHING TEETH.—Rosenthal recommends, for bleaching teeth, hydrogen peroxid, absolutely free from acid, and light rays. The teeth to be treated are isolated and the mucous membrane and skin of the face protected carefully. The teeth are then brushed on all sides with a more or less concentrated solution of perhydrol. The rays of a lamp yielding many ultra-violet rays are then concentrated upon the parts to be bleached. With carious teeth a concentrated solution and the full strength of the lamp may be employed, but with normal teeth greater care is necessary, since severe pains may follow. The results are good no matter what the discoloration is due to, but it is necessary to employ only an acid-free peroxid such as perhydrol.— Le Lab. et le Progrès Dentaire, No. 39, 1910, and Progress in Therapeutics (The Dental Brief).

To Remove the Loose Gum on Flexible Ridge.—To remove the loose gum on the anterior part of the ridge which follows the wearing of a full denture, inject a little of a cocain solution into the surrounding tissue, and with a sharp lance, assisted by a pair of pliers, remove the part. This can be done without pain and the result will be very satisfactory. A good antiseptic wash will be needed by the patient for several days, but the case will soon heal.—G. H. Henderson, L.D.S., D.D.S., Springfield, Ill., The Dental Review.

METHOD OF RESTORING AN ILL-FITTING SHELL CROWN.—Sometimes a patient presents himself with an ill-fitting crown, which, because it is too large for the circumference of the root, has caused an irritation to the gum tissue in that region of the pericemental membrane also. Remove the crown, and prepare the root again. Fill the shell crown with inlay wax, place on the root and get patient to close tightly. Remove, trim off excess of wax, insert sprue wire and cast

with 22 ct. gold. Bevel the outer margin of shell crown towards the root, so as to prevent any irritation and cement in place.—A. Dangar Burne, B.D.S., D.D.S., Sidney, Australia, *The Dental Review*.

To Remove Gold Crowns, Etc.—To remove gold crowns, whether attached to a bridge or alone: Take a separating wheel and cut the lingual surface of the crown from the morsal surface nearly to the cervical margin. Prize the slit open with a small chisel, then place the chisel under one side of the crown where slit, near the morsal surface, and it will almost fall off.

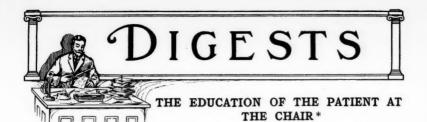
To repair the same: Clean, invest, and heat, afterward packing the slit with filling gold. Place under the blowpipe, and solder. The advantage of this method is that since the cervical margin of the crown is not cut through as when using a crown-slitter, no bending of the crown is necessary, nor is there a possible enlargement of the cervical measurement of the crown.

To remove Melotte's metal from gold: Place in nitric acid, full strength, for about four hours.

To cleanse the hands from laboratory grime: Soak the hands in fairly hot water containing about two tablespoonfuls H₂O₂ to about one quart of water, washing with soap and brush.—Louis Englander, Surg. Dentist, Philadelphia, Pa., The Dental Cosmos.

Efficiency.—Having everything needed at hand and in good order, and one's surroundings comfortable and convenient, adds greatly to one's efficiency. Being able to quickly decide what to do, and how to do it, is another important factor in making the best use of one's time and energy. Puttering around a prospective dental operation, chipping out a little here, grinding off a little there to see how the land lays is time wasting. Do the thing that must be done first, and while doing it decide what to do next. Let the head keep just a little ahead of the hand, and keep the hand busy. Rapid work is well thought out work; hurried work is usually careless, thoughtless work. Learn to work rapidly, but avoid hurry. Hurry invites accidents, and accidents are always time wasting. Make your time and energy interest-bearing capital.—T., The Dental Brief.

To Free a Clogged Washbasin.—If so unfortunate as to have your wash basin clog up, don't send for the plumber; just take your rubber plaster bowl, place over opening to waste pipe and exert pressure upon it, using force. It works like a charm.—E. J. Jensen, Mt. Gilead, Ohio.



BY G. R. WARNER, M.D., D.D.S., GRAND JUNCTION, COLORADO

There is an Indian legend which tells of a good spirit, who, wishing to benefit a young princess, led her into a ripe and golden cornfield. "See these ears of corn, my daughter; if thou wilt pluck them diligently they will turn to precious jewels; the richer the ear of corn, the brighter the gem. But thou mayest but once pass through the cornfield, and canst not return the same way." The maiden gladly accepted the offer. As she went on, many ripe and full ears of corn she found in her path; but she did not pluck them, always hoping to find better ones farther on. But presently the stems grew thinner, the ears poorer, with scarcely any grains of corn on them; further on they were blighted, and she did not think them worth picking. So, sorrowfully, she stood at the end of the field, for she could not go back the same way, regretting the loss of the golden ears she had overlooked and lost.

So with the dentist. Every day he has golden opportunities to fulfill the highest conception of his professional life, and he lets the chances slip by, hoping that the propaganda of public instruction and press education will teach his patients the things which he himself should impart to them and which he can impress upon their minds more effectually than anyone else.

We all know how intimate and friendly is the relation between patient and dentist. The very fact that a person is our patient is evidence that that person has confidence in us, and anything from our lips will have much more effect than if seen in the public press or heard from the lips of a lecturer.

Then, too, the act itself of our taking enough interest to impart knowledge to our patients increases their confidence in us and strengthens the friendly relations. It is evidence to them that we are interested in their welfare and are not serving them for the fee alone.

The opportunity, coupled with the needs of the patient, make it a plain duty for every dentist to educate his patients at the chair. And this opportunity and duty involve another duty—the duty of having the information to impart. It is, therefore, incumbent upon every den-

^{*} Read before the Colorado State Dental Association, 1911.

tist to educate himself broadly enough, not only to meet the needs of everyday practice in regard to his technical skill, but to discuss intelligently with his patients the methods of practice generally known, and to explain explicitly why he is using a certain method in a given case. He should be able to answer questions in regard to the physiology of the mouth as well as to general physiology and the relation of one to the other. He ought to be familiar with the different pathological conditions found in the mouth and to have the ability to describe them, and finally he must by all means instruct his patients in a plain and forceful manner in regard to the maintenance of a physiological condition of the oral cavity. It would also be very useful to have a good knowledge of the history of dentistry, and by means of this, interest a patient in the subject we finally wish to arrive at.

A general knowledge is presupposed and is quite as essential to us in educating our patients as the special knowledge which we *must* possess to some degree. Therefore, it behooves us to keep up to date along all lines and show ourselves to be broad-minded and alive.

TREATMENT OF CHILDREN

We all serve children, and if we pluck the golden ears of opportunity in their case they will become precious jewels indeed. The child's mind is both receptive and retentive, and we have the opportunity to educate them in many matters not necessarily dental. And what we say to them must be said carefully and thoughtfully because of the receptiveness and retentiveness of this storehouse. Childhood is also the period in which the largest number of habits are formed, and it is our opportunity to aid in the formation of good habits, and what higher reward can we expect or wish than the knowledge that we have assisted, however slightly, in the formation of good habits among our young patients? This is a work that does not end at the chair, or in one generation. It goes on in ever-broadening circles, like the ripples on the smooth surface of a lake caused by the dropping of a pebble in the water.

In the case of children particularly, and with adults incidentally, as heretofore noted, the dentist has the opportunity of educating in many fields. And as he educates by example as well as precept, it is essential that a dentist's deportment be above reproach, for he is educating by example unconsciously all the time. It is our opportunity to instill upon a child's mind the importance of meeting an engagement promptly. Let our example be right in this particular, and if for any good reason we keep the patient waiting, we should explain the reason and apologize for so doing.

It devolves upon the dentist, perhaps more than anyone else, to inculcate patience and fortitude, and we should do this by all possible gentleness, firmness and encouragement, being ever careful to keep well within the limit of the child's endurance.

When a child is given into our care, our duty does not end with the simple filling or regulating of the teeth. We should do everything possible to enlist that child's coöperation in making a beautiful, useful and permanent set of teeth and a clean and healthy oral cavity. We can explain to him in an interesting manner the uses of the teeth, the causes of decay, and we can tell him the best-known means of preserving the teeth from decay. In doing this it is necessary to actually demonstrate with a toothbrush in hand how to brush his teeth and mouth and how to use the other accessories of the mouth toilet. Then from time to time we should carefully examine his mouth and show him with a hand mirror wherein he has failed, and by having him again use the toilet articles, show him why he has failed.

It also falls largely to the dentist to tell the child what foods to eat and how to eat them. It is interesting, as well as instructive, to explain to children the process of digestion and assimilation. Through this the importance of mouth digestion, brought about by the thorough mastication of food, can be so forcefully impressed upon their minds that habits of thorough mastication will be formed that will cling to them throughout their lives.

It is frequently the dentist who discovers the mouth-breather, and here is a large field for the education of parent as well as child. How easy, important, and even imperative, it is for a dentist to instruct his patient in this matter. A little timely advice and instruction with a young mouth-breather may mean the saving of an otherwise ruined constitution.

What a simple matter for a dentist, as he is working for his young patient, to draw a picture of the ultimate effect of mouth-breathing. What boy is there who would not be willing, and even anxious, to go through almost anything to be saved from being a weak "sissy-boy" among his fellows, and, instead, be a boy who could play baseball or football, or compete in track sports?

What girl is there who would not respond to the suggestion that she would grow up into a dull, deaf, hatchet-faced woman; weak, pale, stoop-shouldered and generally unlovely, if she did not have the cause of her mouth-breathing removed and the effects already produced corrected?

Yes, gentlemen, it is our privilege, our opportunity, our duty, to instruct our patients at the chair. It is for us, as a noble and learned

profession, to do all in our power for the upbuilding and elevation of the human race, morally, mentally, and physically.

Of course, the major portion of our practice is with adults, and by far the largest proportion of these have not had the instruction in matters dental that they should have had. So we have here a large and prolific field for education at the chair.

ADVANTAGE IN A DEFINITE PLAN OF INSTRUCTION

It is a simple matter for us to have a plan of instruction outlined for different classes of cases, and then to lead the conversation around to our plan in the manner that seems best at the time. Often the patient opens the way by asking questions; but some patients do not ask questions and do not seem to have any particular interest in what we are doing. We should not fall into the error, however, of thinking that time is ill spent or lost if the patient does not seem as responsive as we think he should be. We never know what character of soil the seed is falling on, nor what the harvest will be. It is for us to pluck the golden ears of opportunity and trust that they will turn into the precious stones of healthy mouths and prolonged lives.

There are so many phases of this subject that it would be impossible to go into detail, but I wish to mention some things that occur to me as being of the most importance.

Without doubt, it is our first duty to instruct our patients in prophylaxis, and this is not a hard place to make a beginning, for while some people are interested in contact points, areas of immunity, pulp treatment, etc., a large number can be made interested in the subject of guarding against dental troubles. This subject appeals to them from two points of view; first, because of the pleasure and satisfaction of feeling that every surface of every tooth is perfectly clean and their whole mouth in a sanitary condition; secondly, because of the great probability of tooth decay being largely prevented. In other words, it is much easier to interest a patient in the preservation of a sound tooth than in the repairs of an unsound one.

So, educating our patients in the care of their teeth is a pleasant duty, because we know the good results accruing from such education, and also because it is a dental subject that is very interesting to the patient.

Fathers and mothers can be interested in the subject of their children's teeth, and a little talk on the importance of conserving their children's teeth will always find ready listeners. The subject of the first molar is one in regard to which most parents need some education. A little information about this important tooth may mean its salvation,

where otherwise it might be lost, because "it came in where no other came out."

The parents of children can always be talked to about nasal stenosis and its effect upon the general health, as well as the oral cavity. Λ little timely advice upon this subject may save some children from the serious general, as well as local, trouble, following the condition named. Along this same line we can help children through their parents by telling the parents something of orthodontia and its great possibilities.

It is unfortunate, but I believe it is true, that we do not always feel free to advise the woman expecting to bring a new life into the world. We could and should advise her about her diet during her pregnancy, and should tell her how to care for the baby's mouth, as well as the care of her own mouth, all the time. If mothers were more generally educated along these lines, more infants would come into the world healthy and fewer would go out prematurely.

The opinion is quite too general that one must expect to lose one's teeth with the oncoming of old age, and I do not know any more fitting subject for educating our adult patients about than this; and I might say pleasing, too, for very few would fail to be pleased by the idea that their teeth should and could serve them to their life's end, and all would welcome information from their dental adviser as to how to attain this most desirable condition.

Gentlemen, we are passing through the cornfield. Let us pick the golden ears of our opportunities in educating our patients, and we shall surely receive the jewels of having somewhat lightened human ills, of having even a little increased human happiness; of having helped, if only a trifle, to make the world better.—Items of Interest.

(The discussion of this paper is expected to be published in the September number.)

WOMEN START CLINIC FOR DENTAL SURGERY IN NEW YORK CITY

The upbuilding of character and the overcoming of physical imperfections through remedying irregularities of children's teeth are the objects of a movement which has just been started by Miss Theora Carter, of 610 West 116th Street, the president and founder of the Society of Good Cheer. It is the hope of the society that free clinics may be established, and it was with this end in view that the mouths of some seventy-five children of the school of the Children's Aid Society, 417

West Thirty-eighth Street, were examined by Dr. George B. Palmer, of 40 East Forty-first Street.

Miss Carter was on hand to explain the objects she has in view, and so was Mrs. Montgomery Hallewell, vice-president of the Society of Good Cheer. The children were marshaled by Miss Haight, the superintendent of the school, and one by one the little boys and girls submitted to an examination by the dentist.

* * * * * *

The theory of the work as explained by Dr. Palmer is that nature has arranged for the proper dovetailing of the bony sutures of the head, and that when this goes on as nature intends, the lower jaw, which is the key of proper adjustment, swings into proper position. If through any defect the jaws do not come together or lock naturally then the whole adjustment is thrown out of gear. The obstacles to this natural hinging are the teeth. Unnatural positions of the teeth interfere with the working of nature in the proper closing of the bony structure. All this results in improper development, nose and throat troubles, and other physical disabilities which hinder learning, and warp the moral character.—The New York Times, June 21, 1912.

TEETH AND HEALTH*

By C. N. Johnson, D.D.S., L.D.S., Chicago, Illinois

Mr. Chairman, Ladies and Gentlemen: I am obliged to bring before you a few facts, and facts are sometimes dry, and yet I believe that some things that I have to tell you this afternoon may not prove to be wholly uninteresting. I want to speak to you in regard to what is becoming the problem of all governments—and that is the problem of public health. In the United States if a farmer out in the country finds that a hog is sick and he is puzzled to know what the trouble is with the hog, and he becomes fearful that the disease may spread to other animals on his farm, he writes to the Government about it, and the Government will send him explicit directions; and in almost every instance the Government will send an expert to his farm to look into the whole trouble, and point out what can be done so that the disease may be checked. That hog represents dollars and cents, and

^{*} Address delivered in St. Mary's Hall, Toronto, April 26, 1912.

the Government has learned that the loss to an individual means a loss to the community in which that individual lives,

But there is another picture. Supposing a widow in a back street in one of our American cities is left with a large family to bring up, and she is doing her best to bring them up good, responsible citizens of the country in which they live. Supposing that mother becomes ill; something is wrong, and she does not know what it is, and she remembers that she is living under a very good Government, and she thinks she will write and see if she can get some suggestion from the authorities. She does so, and she gets a very polite note in reply from the Government, stating that, unfortunately, there is no department to look after her case. Which has led Dr. Hurty, of Indianapolis, to remark that there is some advantage, after all, in being born a hog. (Laughter.)

Now, I want to say, to the everlasting honor of the Province of Ontario, that that condition does not exist here to-day. Very recently there has been inaugurated a department of the Government that will look after the little widow and take care of her; and for this and other reasons I am proud of the fact that I was born in the Province of Ontario.

The reason that the Government will look after the sick animal is that the animal represents money, and it is a perfectly proper thing for the Government to do. But governments all over the world must learn the fact that the greatest asset of a nation is the human asset. Prof. Irving Fisher, of Yale, has estimated that human disease has cost the people of that country an enormous sum of money, I won't pretend to say how much, but it runs into billions of dollars every year. You may wonder what all this has to do with oral hygiene, or health of the mouth. I want to point out the relationship that exists between the conditions of the mouth and the conditions that exist in the entire system. In the city of Chicago, some time since, we had an epidemic of scarlet fever in the schools, and the health department very properly quarantined the children who had it; and they were kept in their homes until the infective stage was long since past, and after the danger was supposed to be over they were allowed to return to school in the usual course. But the disease kept spreading; those children who came back after the requisite number of weeks of quarantine gave it to other children, and the health department was puzzled. Finally, Dr. Evans, then Health Commissioner of Chicago, began to look very closely for the reason why these children brought back the disease to the school, and he found that it was because they had cavities in their teeth, which were harboring the scarlet-fever germs and keeping them

alive for an indefinite time; and immediately the trouble disappeared when they compelled the children to have their teeth put into proper condition. In Valparaiso, Indiana, they had scarlet fever there for years; finally, Dr. Nesbitt, of the health department, began to look into the matter very closely, and he came to the same conclusion, and he made a ruling that any child that had been suffering from an infectious disease should be sent to the dentist and have the mouth put into proper shape. When this was done scarlet fever was immediately stamped out in Valparaiso. And, if it is true that neglected teeth will carry disease—and it seems unquestionably to be the case—then surely it is time that we should stop this dental decay in the mouths of our children.

I should like to refer, briefly, to tuberculosis. No man, before any audience, can mention that word without causing a thrill to go through the people who hear him. The toll taken by this disease is something appalling to think of; and we are just beginning to realize that the prevention of a disease is better than the cure. I know of no profession which is doing so much for the prevention of human suffering as is the medical profession. No other profession could reach the ear of the public as has been recently done by the medical profession. Dr. Evans has, I believe, done more in Chicago to direct public attention to the prevention of disease than any other man. He was the first man to get the ear of the city council to have a dentist appointed as a regular member of the health department.

In this matter of tuberculosis I want to say that a man who has investigated it very closely has made the statement that much of the tuberculosis from which people are suffering to-day comes, either directly or indirectly, from faulty conditions in the mouth. I am not a medical man, but I can explain, perhaps, what the conditions are. A cavity in the tooth of a child who is at all susceptible to tuberculosis forms a channel whereby the bacillus will travel down through the decayed tooth and cause an infection of the glands in contact with it, and that means finally the infection of the entire system. The tubercle bacillus has been traced directly from a decayed tooth down the canal in the root to the glands of the mouth and neck. Unless you keep the mouths of your children healthy you cannot expect the general system to be healthy.—Dominion Dental Journal.

(This article will be continued in the September number.)



THE ILLINOIS STATE DENTAL SOCIETY MEETING, MAY, 1912

. . . The National Dental Association reorganization plan was decided unfit for adoption by our society, as at present outlined. With the hope that some satisfactory plan might be worked out more suitable to the conditions in reorganized state societies, the following resolutions were adopted:

Whereas, the Illinois State Dental Society was reorganized in 1904, and as a result has since that year maintained a membership of from 1,250 to 1,700, as compared with less than 300 previously, and has wielded a correspondingly greater influence for the betterment of dentistry and dental service in the state of Illinois; and

Whereas, many other state dental societies have since reorganized on plans more or less similar to the Illinois plan, with equally beneficial results; and

Whereas, there has, during the past few years, been considerable agitation for the reorganization of the National Dental Association, without satisfactory results up to the present time; and

Whereas, the Executive Council of the Illinois State Dental Society does not consider the plan presented to this Society by the Committee on Reorganization of the National Dental Association to be a practical solution of the question; and

Whereas, the Illinois State Dental Society is desirous of furthering plans for a properly organized and efficient national association; therefore be it

Resolved, by the Executive Council of the Illinois State Dental Society, that a committee of three members be appointed to develop plans looking toward the end desired; and be it further

Resolved, that said committee be empowered to invite the presidents of other reorganized State Dental Societies to appoint representatives to a meeting to discuss such plans, in the hope that those men, who have had experience in the work of reorganization in these several states, may agree upon plans which will be acceptable to their respective states.

The action of the Executive Council in passing the above resolutions was approved by the general body of the society.

The exhibits were attractive and gave ample opportunity to note the improvement in equipment and supplies that characterizes our calling particularly. The dentist only lacks capital nowadays to provide himself with the means of turning drudgery into sport and pleasant diversion, imitating the farmer who can provide himself with an automobile-like tractor for his plow and harvester.—Bulletin of the Illinois State Dental Society.



Local Anesthesia in Dentistry. With Special Reference to the Mucous and Conductive Methods. A Guide for Dentists, Surgeons and Students. By Professor Dr. Guido Fischer, Director of the Royal Dental Institute of the University of Marburg. Translated by Dr. Richard H. Riethmüller, of the Dental Department of the Medico-Chirurgical College, Philadelphia. Large octavo, 202 pages, with 105 figures (mostly colored). Cloth, \$4.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1912.

We are in receipt of the above volume and are pleased to note the happy result of an apparently exhaustive scientific research on local anæsthesia, which is given in a practicable form. We find that the author has carefully compared and tested most all of the local anæsthetics and is in favor of novocaine as a substitute for cocaine. Though not claiming novocaine as absolutely nontoxic, he believes that its toxic effect is much lighter than cocaine and that it is more irritant. To overcome its vasomotor effect he recommends a combination of some suprarenal extract and considers the anæsthetizing power of novocaine increased thereby.

We quote from the volume: "Novocaine solutions are absolutely nonirritant. Even if they are introduced into fresh wounds in 20 per cent. solutions, or in concentrated powder form, not only no symptoms whatever are observed in the areas of application, but the inflammatory process is even favorably influenced, as we have been able to demonstrate. The solutions can be boiled any number of times without being affected. The toxic effect of novocaine is relatively light. In very high doses tonicoclonic spasms, together with opisthotonos, great agitation accelerated and shallow respiration are noted. The maximal dose for subcutaneous injection is 0.75 gram. Novocaine is seven times less toxic than cocaine and three times less toxic than the other substitutes thereof." (Page 42.)

One of the attractions of this book is the large number of illustrations; these are of immense value to the student. The book is well printed on heavy paper and bound in dark green. We recommend the volume as a most helpful guide on the subject of local anaesthetics. Report of Scientific Experiments in the Cleveland Public Schools. Published by The National Mouth Hygiene Association, 800 Schofield Building, Cleveland, Ohio. Price 5 cents per copy; \$30 per thousand, without covers.

Many dentists watched with just interest the Oral Hygiene work conducted in Marion School, Cleveland. Here is a concise report of the results, together with certain valuable papers on the subject. Dentists who desire to interest the public or the educators of their communities cannot do better than to procure copies of this book for distribution. The book is illustrated with photographs of the children.

Table of contents is as follows:

- 1. The Why, When, Who, and What of the Marion School Dental Experimental Class. By W. G. Ebersole, M.D., D.D.S., Secretary-Treasurer of the National Mouth Hygiene Association. Page 3.
- 2. Final Report made to the Cleveland Board of Education, by the Chairman of the Oral Hygiene Committee of the National Dental Association. Page 9.
- 3. Report of the work in October number of the Dentists' Record. Page 10.
- 4. Oral Hygiene as it Appeals to Education. By Miss Cordelia L. O'Neill, Principal of Marion School, Cleveland, Ohio. Page 13.
 - 5. Individual Records of the Children. Page 20.
- Assistant Superintendent Warren E. Hicks; Letter Relating to the Value of the Marion School Dental Experiment. Page 31.
- 7. Statement from the Chairman of the Education and Oral Hygiene Committee of the Ohio State Dental Society. Page 32.
- 8. Statement from the Education and Oral Hygiene Committee of the Cleveland Dental Society. Page 32.
- 9. Statement of Assistant Superintendent H. C. Muckley, Cleveland Public Schools. Page 33.
- 10. Statement of Assistant Superintendent Warren E. Hicks, Cleveland Public Schools. Page 33.
- 11. Resolution by Cleveland Dental Society, Giving Credit for the Experimental Work. Page 34.
- 12. Frequency with which Tuberculosis Occurs among School-Teachers. State Department of Health, Michigan. Page 34.
- Principles and Methods of Orthodontics. An Introductory Study of the Art for Students and Practitioners of Dentistry. By B. E. Lischer, D.M.D., Professor of Orthodontics, Washington University Dental School; Member of the American Society of Orthodontists; Author of "Elements of Orthodontia," etc. 12mo, 258 pages,

with 248 illustrations. Cloth, \$2.75, net. Lea & Febiger, Publishers, Philadelphia and New York, 1912.

The author presents this book in order to provide students and dentists with a guide to the practice and principles of Orthodontia and he has done so very fully, although he calls it—" An Introductory Study."

The volume is divided into an introduction, in which is considered the Definition and Scope, Literature, Practice and Technique of Orthodontics, and then into two parts. Part one, Principles of Treatment, containing twelve chapters; and part two, Methods of Treatment, embracing six chapters.

The author's familiarity with his subject and all that has been written upon it enables him to present a volume that must prove a valuable addition to the dental profession.

The work is well illustrated, printed on good paper and most attractively bound.

BOOKS AND PAMPHLETS RECEIVED

RUBBER HAND STAMPS AND THE MANIPULATION OF RUBBER. BY T. O'CONOR SLOANE, A.M., E.M., Ph.D. The Norman W. Henley Publishing Co., New York City.

PROCEEDINGS OF THE NINETEENTH ANNUAL MEETING OF THE INSTITUTE OF DENTAL PEDAGOGICS, held at Chicago, Illinois, January, 1912. Published by the Institute of Dental Pedagogics.

SOCIETY AND OTHER NOTES

Officers of Societies are invited to make announcements here of meetings and other events of interest.

DISTRICT OF COLUMBIA.

The meeting of the National Dental Association will take place in Washington, September 10-13, 1912. Headquarters will be the New Willard Hotel.—Homer C. Brown, Secretary.

INDIANA.

The Northern Indiana, Dental Society will be entertained this year at Sylvester, Lake, Rome City, September 3d and 4th.—ROBERT GILLIS, Secretary.

WEST VIRGINIA.

The 6th annual meeting of the West Virginia State Dental Society will be held in the Assembly Room of the Webster Springs Hotel, Webster Springs, W. Va., August 14, 15 and 16, 1912. Opening session at 2 P.M., Wednesday, August 14th.

NATIONAL DENTAL ASSOCIATION

The 1912 session of the National Dental Association will be held in Washington, D. C., September 10th to 13th, and all indications are favorable for this being the most important and successful meeting that this association has ever held.

The Local Committee of Arrangements has selected the New Willard as "Headquarters Hotel," and necessary accommodations for the meetings of the general sessions and sections, as well as the "all-day clinic" on the last day, are to be held in the commodious ball room on the eleventh floor of this hotel.

The reorganization proposition has been receiving most liberal support from the State Societies, which have met since the Cleveland meeting, when a constitution, along the lines of the American Medical Association, was tentatively adopted. This question will come up at this meeting for final action and every one interested in the perfecting of a representative National Dental Association should be present. You are respectfully requested to remember this meeting when making your vacation arrangements, as this presents an excellent opportunity to attend the meeting of the National Dental Association and visit our National Capitol.

The following are on the Literary Programme for addresses, lectures and essays: Dr. Arthur R. Melendy (president's address), Drs. Newell S. Jenkins (Dresden. Germany), Harvey W. Wylie (M.D.), Leon S. Medalia (M.D.), F. E. Stewart (M.D.), C. V. Conzett, B. Holly Smith, M. L. Rhein, T. B. Hartzell, George E. Hunt, C. A. Hawley, George B. Harris, W. O. Huliek, M. C. Smith, C. M. McCauley, W. A. Lovett, Joseph Head, H. H. Johnson, J. F. Biddle and J. J. Moffitt. Have not been furnished with all the subjects of the above at this date, July 10th, and for that reason all have been omitted; however, all of those selected are men of recognized ability and they will cover the important subjects before our profession to-day.

Information regarding railroad rates may be secured from your local agent, as conditions vary in different sections of the country. Any agent will gladly furnish any information requested.—Homer C. Brown, *Recording Secretary*, 185 East State Street, Columbus, Ohio.

THE CLINIC OF THE NATIONAL DENTAL ASSOCIATION

The Clinic Committee desires to extend to all members in good standing of all dental societies a cordial invitation to attend and to clinic at the "all-day" clinic of this Association to be held at the New Willard Hotel, Washington, D. C., Friday, September 13th. The enormous ball room, top floor of this hotel, has been secured and the management promises us every convenience.

We wish particularly to call your attention to the classification of the different clinical material, where every effort will be made to arrange the different events according to title and in sequence so that the various "steps" in the operation may be seen at a glance, without the usual regard to chair or table; this will avoid confusion and save time, allowing the members to select and study favorite subjects without hunting all over the room.

From the material now in hand your committee can promise a large and varied clinic. That we may assemble all clinicians' names and titles for the preliminary programme, kindly reply at once to Clarence J. Grieves, Chairman Clinic Committee, Park Ave., nr. Madison St., Baltimore, Md.

COMMITTEE

A. O. Ross, Vice Chairman, 807 N. High St., Columbus, Ohio; S. W. Bowles, Secretary, 1616 Eye, Washington, D. C.; W. R. Clack, Mason City, Iowa; A. P.

Burkhart, Auburn, N. Y.; J. T. McClenahan, Washington, D. C.; W. D. Tracy, New York City; George E. Savage, Worcester, Mass.; John H. McClure, Wheeling, W. Va.; J. E. Chace, Ocala, Fla.; E. L. Pettibone, Cleveland, Ohio; H. J. Allen, Washington, D. C.; W. R. Wright, Jackson, Miss.; C. A. Lundy, Los Angeles, Cal.; S. H. McAfee, New Orleans, La.; C. M. Barnwell, Atlanta, Ga.; Richard L. Simpson, Richmond, Va.; W. H. Scherer, Houston, Texas.

MEETING OF NATIONAL ASSOCIATION OF DENTAL FACULTIES

The National Association of Dental Faculties will meet at the New Willard Hotel, Washington, D. C., on Friday and Saturday, September 6th and 7th. The Executive Committee will meet at nine o'clock Friday morning, the general meeting opening at ten o'clock the same morning.—George Edwin Hunt, Secretary.

SOUTHERN BRANCH OF THE NATIONAL DENTAL SOCIETY

The Fifteenth Annual Meeting of the Southern Branch of the National Dental Association will be held jointly with the National Dental Association at Washington, D. C., September 10-13, inclusive.

Only a short business session will be held for the election of officers and transaction of such other business as may be brought before the meeting.—Thomas T. Moore, Secretary.

ATTENTION.

MEMBERS OF THE DENTAL PROFESSION OF THE UNITED STATES OF AMERICA

The Fifteenth International Congress of Hygiene and Demography is to be held in Washington, D. C., September 23–28, 1912, under the auspices of the United States Government.

This is the most important meeting of this kind held in this country in its history, and the United States Government is acting as host to the fifteen nations that have so far signified their intention of participating in the coming congress.

This organization is the highest authority in matters of hygiene in existence to-day.

Through the courtesy of the United States Government, the dental profession of this country has received an invitation to contribute to the success of the coming congress. A place has been made for representatives of the dental profession, both upon the literary programme and among the exhibitors. This is the first time that the dental profession of this country has received such recognition by the home government.

The opportunity for which we have been seeking, that is, the opportunity to show the important relation the human mouth bears to the health, strength and welfare of mankind, is now before us.

The influence of this congress is world-wide in its scope, and will be visited by thousands upon thousands of people who are interested in hygiene and the general welfare of mankind.

If American dentistry is to maintain its reputation throughout the world it

behooves the members of the profession of this country to unite in a general effort to have the largest, finest and most instructive dental exhibit in the history of dentistry assembled on this occasion.

At the request of the Oral Hygiene Committee of the National Dental Association, Dr. J. W. Schereschewsky, U.S.P.H. and M.H.S., director of the exhibition, has set aside 1,000 square feet of floor and 500 square feet of wall space in the building, which is being erected for the exhibits, to be devoted for the use of the dental profession for exhibit purposes.

At the meeting of the Oral Hygiene Committee of the National Dental Association, held in Cleveland, March 23, 1912, a resolution was passed, inviting the oral hygiene committees of all state and local organizations to cooperate with it in making a success of this exhibit. Space will be assigned in such a manner that each state, city and town will receive full credit for contributions in this direction.

The Committee earnestly requests that every member of the profession who is interested in mouth hygiene and the welfare of the dental profession become actively interested in a campaign to make a success of this exhibit. The oral hygiene committees of the State Dental Societies should endeavor to place themselves in touch with local organizations in their states in an endeavor to secure aid in the way of material suitable for exhibits, and in money to defray the expenses of such an exhibit as this should be. The Committee would ask that each state and local organization make appropriations to meet the expense of collecting, mounting and displaying such material as would make a creditable exhibit.

The Committee requests that the oral hygiene committees that can or will take part in this exhibit communicate at once, or at the earliest possible moment, with Dr. W. G. Ebersole, Chairman of the Oral Hygiene Committee of the National Dental Association, 800 Schofield Building, Cleveland, Ohio, or for local information to Dr. W. Smith Frankland, The Burlington, Washington, D. C., Assistant Secretary-Treasurer of the National Mouth Hygiene Association for the District of Columbia.

The Oral Hygiene Committee of the National Dental Association instructed its Secretary, Dr. Waldo E. Boardman, of Boston, Mass., to communicate with Dr. William H. Potter, of Boston, Mass., with a view of obtaining some idea of the dental exhibit which was shown at the International Hygiene Exhibition in Dresden, May-October, 1911. Dr. Potter's letter is given herewith, with a view of giving some idea of how to build or prepare an exhibit of this kind.

" DEAR DOCTOR BOARDMAN:

"Boston, April 13, 1912.

"In regard to the Dental Exhibit at the International Hygiene Exhibition in Dresden, May-October, 1911, I am obliged to rely upon my memory, inasmuch as I was unable to find a catalogue of this portion of the department. There were in the exhibit as follows:

- Large numbers of anatomical specimens. Skulls: parts of skulls with teeth in place. In this respect, it was similar to the exhibition in connection with the Fifth International Dental Congress at Berlin, 1909.
- 2. Orthodontia cases represented by models. Regulating apparatus.
- Teeth representing the progress of decay from the initial softening to the large destructive cavity.
- Charts showing the percentage of dental decay among people of various occupations and living under various conditions.
- Charts showing the influence of food and water (hard or soft) upon the percentage of dental decay.
- 6. Charts giving rules for the prevention of decay.
- School dental clinics. A description of the most important ones of Europe, with literature giving statistics and methods of work.

8. The analysis of saliva. Charts showing the method employed.

"These are a few of the features. There were many more which I wish I could remember.

Very truly yours,

"WILLIAM H. POTTER."

Let every member of the profession who is interested, write, offering to do his part. Do not wait for us to write to you, for we have much to do if we undertake to make a success of this work.

At the same meeting the Oral Hygiene Committee of the National Dental Association passed a resolution, inviting the dental colleges of this country to contribute to the success of the dental exhibit; and the secretaries or deans of the various colleges are requested to communicate either with Dr. W. G. Ebersole or Dr. W. Smith Frankland, indicating what aid they will give in connection with the coming exhibit. The exhibit will be so arranged that each college will be assigned space for its own exhibit.

Come to our aid, and give us your hearty support in this work.

Appealing to every member of the profession to become actively interested in this exhibit in the interest of the dental profession as a whole, we are,

Respectfully yours,

THE ORAL HYGIENE COMMITTEE OF THE NATIONAL DENTAL ASSOCIATION,

W. G. EBERSOLE,
B. HOLLY SMITH,
WALDO E. BOARDMAN,
J. V. CONZETT,
S. W. FOSTER.

PATENTS

- 1,016,128, Artificial tooth plate, Alonzo C. Buttmann, Grand View, Iowa.
- 1,016,555, Tooth, Loyd David, Nauvoo, Ill.
- 1,016,786, Dental swage, James B. Sedberry, Thompsons Station, Tenn.
- 1,016,456, Artificial tooth, George W. Todd, Omaha, Neb.
- 1.017.450. Blowpipe-carrier, George Nevergold, Jeannette, Pa.
- 1,018,340, Dental disk-holder, Jerry A. Prescott, Steele, N. D.
- 1,918,803, Anchoring device for teeth fillings, Axel F. Anderberg, Pawtucket, R. I.
- 1,018,712, Dentist's anvil, Louis F. Kocaler, Chicago, Ill.
- 1,018,713, Dentist's anvil, Louis F. Kochler, Chicago, Ill.
- 1,018,927, Toothbrush, Jules J. Sarrazin, New Orleans, La.
- 1,019,733, Means for protecting dental work, Addison R. De Pass, Columbia, S. C.
- 1,019,233, Manufacture of cased pins for artificial teeth, Herbert A. Edwards, London, England.
- 1,019,244, Ingot-mold, Emil Gathmann, New York, N. Y.
- 1,019,519, Apparatus for making backing for teeth, Osear M. Polin, San Luis Obispo, Cal.
- 1,020,018, Detachable toothbrush, Alexander L. Bonin, Montreal, Quebec, Canada.
 - 13,388, Reissue, Cuspidor, Henry E. Weber, Canton, Ohio.
 - 43,321, Design, Tool handle, Edmund D. Gilbert, Philadelphia, Pa.

Copies of above patents may be obtained for fifteen cents each, by addressing John A. Saul, Solicitor of Patents, Fendall Building, Washington, D. C.